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LEGISLATIVE HISTORY

Public Law 585--79th Congress

Chapter 724--2d Session

S. 1717

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DIGEST OF PUBLIC LAW 585

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY. Establishes an Atomic Energy Commission of five full-time members to administer domestic controls over atomic energy and be responsible for programs to assist and foster private research and development, conduct Government research, and control scientific and technical information concerning the practical industrial application of atomic energy as soon as effective safeguards can be devised. Provides for a General Advisory Committee of nine civilian members to advise the Commission on scientific and technical matters. Provides for a Military Liaison Committee appointed by the Secretaries of War and Navy. Directs the Commission to assist private and public institutions in acquiring knowledge regarding atomic energy through contracts, agreements, and loans (including the making available of its equipment and facilities). Provides for Government ownership of all atomic-energy production facilities, for Government operation of such facilities (except that contracts may be entered into for operation), and for licensing by the Commission of the manufacture, production, or transfer of facilities for production of fissionable materials. Vests in the Commission the ownership of all fissionable materials, with provision for just compensation to private owners. Prohibits manufacture of atomic-energy devices without a license issued by the Commission (except for research and development of devices and equipment for medical therapy). Prohibits issuance of such license until 90 days after a report on the case has been submitted to Congress. Provides for control of information, restrictions on patents, and transfer of Government fissionable materials, atomic weapons, etc., to the Commission. Establishes a Joint Congressional Committee on Atomic Energy.

INDEX AND SUMMARY OF HISTORY ON S. 1717

October 9, 1945	Senate Resolution 179, providing for a Special Senate Committee on Atomic Energy, was considered, amended, and agreed to.
November 1, 1945	H. R. 4566 was introduced by Rep. May and was referred to the House Committee on Military Affairs. Print of the bill as introduced. (Similar bill).
November 5, 1945	House Committee on Military Affairs reported H. R. 4566 without amendment. House Report 1186. Pts. 1 and 2. Print of the bill as reported.
November 27, 1945	Hearings: S. Res. 179. Pts. 1, 2, 3, 4, and 5.
December 20, 1945	S. 1717 was introduced by Senator McMahon and was referred to the Senate Special Committee on Atomic Energy. Print of the bill as introduced.
January 22, 1946	Hearings: S. 1717, Senate. Pts. 1, 2, 3, 4, and 5.
March 29, 1946	Amendment to S. 1717 proposed by Senator Johnson. Print of the amendment.
April 19, 1946	Senate Committee reported S. 1717 with amendments. Senate Report 1211. Print of the bill as reported.
May 8, 1946	Amendment to S. 1717 proposed by Senator McMahon.
June 1, 1946	S. 1717 debated in the Senate and passed with amendments.
June 5, 1946	S. 1717 was referred to the House Committee on Military Affairs. Print of the bill as referred.
June 11, 1946	Hearings: House, S. 1717.
July 10, 1946	House Committee reported S. 1717 with amendments. House Report 2478. Print of the bill as reported.
July 13, 1946	House Rules Committee reported House Resolution 708 for the consideration of S. 1717. House Report 2518.
July 16, 1946	House agreed to H. Res. 708 for the consideration of S. 1717.
July 17, 1946	House began debate.
July 18, 1946	House continued debate.
July 19, 1946	House continued debate.
July 20, 1946	Debate concluded. Passed the House with amendments.

July 22, 1946	Both Houses appointed Conferees. Print of the bill with the amendments of the House numbered.
July 25, 1946	House received the Conference Report. House Report 2670.
July 26, 1946	Both Houses agreed to the Conference Report.
July 27, 1946	S. 1717 was printed in the Record as it went to the President for signature.
August 1, 1946	Approved. Public Law 585.

79TH CONGRESS
1ST SESSION

S. RES. 179

IN THE SENATE OF THE UNITED STATES

OCTOBER 9 (legislative day, OCTOBER 2), 1945

Mr. McMAHON submitted the following resolution; which was referred to the
Committee on Interstate Commerce

OCTOBER 15, 1945

Reported by Mr. McMAHON, with amendments, and referred to the Committee
to Audit and Control the Contingent Expenses of the Senate

[Omit the part struck through and insert the part printed in italic]

OCTOBER 18, 1945

Reported by Mr. LUCAS, without additional amendment

OCTOBER 22, 1945

Considered, amended, and agreed to

RESOLUTION

1 *Resolved*, That a special committee on atomic energy
2 to be composed of eleven Members of the Senate appointed
3 by the President pro tempore of the Senate, of whom one
4 shall be designated as chairman by the President pro tempore,
5 is authorized and directed to make a full, complete, and con-
6 tinuing study and investigation with respect to problems
7 relating to the development, use, and control of atomic
8 energy. All bills and resolutions introduced in the Senate,

1 and all bills and resolutions from the House of Representa-
2 tives, proposing legislation relating to the development, use,
3 and control of atomic energy shall be referred to the special
4 committee. The special committee is authorized to report to
5 the Senate at the earliest practicable date by bill or other-
6 wise with recommendations upon any matters covered by
7 this resolution. The existence of this committee shall termi-
8 nate at the end of the Seventy-ninth Congress.

9 For the purposes of this resolution the committee, or any
10 duly authorized subcommittee thereof, is authorized to hold
11 such hearings, to sit and act at such times and places during
12 the sessions, recesses, and adjourned periods of the Senate
13 in the Seventy-ninth Congress, to employ such experts, and
14 such clerical, stenographic, and other assistants, to require
15 by subpoena or otherwise the attendance of such witnesses
16 and the production of such correspondence, books, papers,
17 and documents, to administer such oaths, to take such testi-
18 mony, and to make such expenditures, as it deems advisable.
19 The cost of stenographic services to report such hearings shall
20 not be in excess of 25 cents per hundred words. The ex-
21 penses of the committee, which shall not exceed \$25,000,
22 shall be paid from the contingent fund of the Senate upon
23 vouchers approved by the chairman.

RESOLUTION

Creating a special committee to investigate problems relating to the development, use, and control of atomic energy.

By Mr. McMAHON

OCTOBER 9 (legislative day, OCTOBER 2), 1945

Referred to the Committee on Interstate Commerce

OCTOBER 15, 1945

Reported with amendments and referred to the Committee to Audit and Control the Contingent Expenses of the Senate

OCTOBER 18, 1945

Reported without additional amendment

OCTOBER 22, 1945

Considered, amended, and agreed to

79TH CONGRESS
1ST SESSION

H. R. 4566

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 1, 1945

Mr. MAY introduced the following bill; which was referred to the Committee on Military Affairs

A BILL

For the development and control of atomic energy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 FINDINGS AND DECLARATION OF POLICY

4 SECTION 1. Research and experimentation in the field
5 of nuclear fission has attained the stage at which the release
6 of atomic energy on a large scale is practical. The proper
7 development and utilization of such energy will advance the
8 national welfare, secure the national defense, insure the na-
9 tional safety, and promote world peace, to an extent and
10 by means which cannot now be measured. The misuse of
11 such energy, by design or through ignorance, may inflict

1 incalculable disaster upon the Nation, destroy the general
2 welfare, imperil the national safety, and endanger world
3 peace. In the highest national interest, and to protect the
4 national existence, it is essential to develop fully the new
5 strength and to promote the enrichment of the national life
6 that can come from knowledge and practical use of this newly
7 tapped source of energy. Accordingly, it is hereby declared
8 to be the policy of the United States, (A) to encourage free
9 research in the field of nuclear energy, and in other scientific
10 fields employing the results or methods of research in that
11 field, and to further the practical application of such research;
12 and (B) in the interest of the Nation and world peace, to
13 control the substantial sources of atomic energy, and such
14 activities concerned with the release and utilization of atomic
15 energy as are on a scale which would constitute a national
16 hazard, or which would be of military or industrial value.
17 The primary objectives of all action taken under this Act
18 to fulfill the foregoing policy shall be the promotion of the
19 national defense, the protection of the safety of the inhabi-
20 tants of the United States, the promotion of world peace,
21 the enrichment of the national life, the promotion of the gen-
22 eral welfare, and the furtherance of the acquisition of knowl-
23 edge concerning atomic energy.

24 THE ATOMIC ENERGY COMMISSION; ADMINISTRATOR

25 SEC. 2. (a) There is hereby established the Atomic

1 Energy Commission (hereinafter called the "Commission")
2 which shall be composed of nine members, who shall be
3 appointed by the President, by and with the advice and
4 consent of the Senate. The President shall initially appoint
5 three members to serve for three years, three for six years,
6 and three for nine years; and thereafter each member ap-
7 pointed shall serve for a term of nine years, except that a
8 member appointed to fill a vacancy occurring prior to the
9 expiration of the term for which his predecessor was ap-
10 pointed shall be appointed for the remainder of such term.
11 The President shall designate one of the members of the
12 Commission as Chairman. Six of the members shall con-
13 stitute a quorum of the Commission. Members of the Com-
14 mission may be removed by the President only for inability
15 to act, neglect of duty, malfeasance in office, conflict of
16 interests, or because continuance of the member in office
17 would be inimical to the national interest. The members
18 of the Commission, except officers of the armed forces on
19 active duty and civilian members holding other offices or
20 positions under the United States, shall receive a per diem
21 allowance of \$50 for each day spent in meetings or con-
22 ferences of the Commission and all members shall receive
23 compensation for necessary traveling or other expenses
24 incurred while engaged in the work of the Commission.
25 The provisions of sections 109 and 113 of the Criminal

1 Code (U. S. C., 1940 edition, title 18, secs. 198 and 203)
2 shall not be deemed to apply to any person because of
3 membership on the Commission, and members may engage
4 in other occupations or businesses, private or governmental,
5 to an extent not inconsistent with the performance of their
6 duties, and may hold other offices or positions under the
7 United States and receive compensation therefor.

8 (b) The Commission shall meet at least four times in
9 every calendar year.

10 (c) The Commission shall, without regard to the civil-
11 service laws, appoint an Administrator and a Deputy Ad-
12 ministrator who shall not be members of the Commission
13 and shall serve at its pleasure. The Administrator and the
14 Deputy Administrator shall engage in no other occupation
15 or business, and shall receive compensation at the rate of
16 \$15,000 and \$12,000 per year, respectively, in addition
17 to which each shall be reimbursed for necessary traveling
18 expenses.

19 (d) Notwithstanding the provisions of law codified in
20 the United States Code, 1940 edition, title 10, section 576,
21 or title 5, sections 59 (a) and 62, or any other statute, any
22 active or retired officer of the armed forces, the Coast and
23 Geodetic Survey, and the Public Health Service, may serve
24 as a member of the Commission, as Administrator, or as
25 Deputy Administrator, without prejudice to his commis-

1 sioned status as such officer; no retired officer shall be deemed
2 to have been placed on active status by reason of such
3 service; any officer serving as Administrator or as Deputy
4 Administrator shall receive, in addition to his pay from
5 the United States as such officer, an amount equal to the
6 difference between such pay and the compensation pre-
7 scribed in subsection (c).

8 (e) The Commission and the Administrator, within
9 the limits of funds which may be made available, may
10 each employ and fix the compensation of necessary per-
11 sonnel without regard to the provisions of the civil-service
12 laws, the Classification Act of 1923, or any other statute,
13 and may each make such expenditures for supplies, prop-
14 erty, facilities, and services as may be necessary to carry
15 out their respective functions.

16 GENERAL AUTHORITY OF THE COMMISSION AND THE
17 ADMINISTRATOR

18 SEC. 3. (a) The Commission shall have plenary super-
19 vision and control over all matters committed to the juris-
20 diction of the Commission (including the Administrator) by
21 this Act. In the performance of its functions, the Commis-
22 sion shall adopt the policy of (1) full encouragement of free
23 research in the field of nuclear energy, and in other fields
24 employing the results or methods of research in that field,
25 together with the furtherance of the practical application of

1 such research; (2) noninterference with the conducting and
2 disclosure by private persons of research in the field of
3 nuclear energy, or in other fields employing the results or
4 methods of research in that field, where the release of actual
5 amounts of atomic energy involved in such research are not
6 deemed by the Commission to be of military or industrial
7 value or to constitute a national hazard; (3) minimum inter-
8 ference consistent with the accomplishment of the objectives
9 of this Act with the conducting and disclosure of other private
10 research and industrial activities; and (4) employing other
11 Government agencies, educational and research institutions,
12 and private enterprise to the maximum extent consistent
13 with the accomplishment of the objectives of this Act. The
14 activities of the Commission shall be carried on in a manner
15 consistent with the foreign policy and the national defense
16 policy of the United States, as such policies may from time
17 to time be communicated to the Commission by the President.

18 (b) Subject to the direction and supervision of the
19 Commission, the Administrator shall be charged with and
20 responsible for the administration of this Act, and any power,
21 function, duty, authority, or discretion conferred on the
22 Administrator by or pursuant to any provision of this Act
23 shall be exercised or performed under, or subject to, the
24 direction and supervision of the Commission. The Deputy
25 Administrator shall have such authority and exercise such

1 powers as may be delegated to him by the Administrator
2 and, in the absence of the Administrator, or in the event of
3 his inability to act, shall act as Administrator. With this
4 in view, the Deputy Administrator shall at all times be kept
5 fully informed by the Administrator.

6 (c) All Government agencies are directed to render full
7 cooperation, aid, and assistance to the Commission and the
8 Administrator, to effectuate any applicable regulations, orders,
9 and directives of the Commission and the Administrator.
10 With the consent of such agencies, or with the approval of
11 the President, the Commission and the Administrator may
12 themselves utilize and direct the services of officers or em-
13 ployees of other Government agencies.

14 ADVISORY BOARDS

15 SEC. 4. (a) The President may from time to time estab-
16 lish such advisory boards as he deems appropriate to assist
17 in the effectuation of the purposes of this Act, and shall pre-
18 scribe the composition, functions, duties, and duration of such
19 advisory boards. One member of each board shall be desig-
20 nated by the President as chairman thereof.

21 (b) Members of the boards, except officers of the armed
22 forces on active duty and civilian members holding other
23 offices or positions under the United States, shall receive a
24 per diem allowance of \$25 for each day spent in actual meet-
25 ings or conferences, and all members shall receive necessary

1 traveling and other expenses while so engaged. The provi-
2 sions of sections 109 and 113 of the Criminal Code (U. S. C.,
3 1940 edition, title 18, secs. 198 and 203) shall not be
4 deemed to apply to any person because of membership on
5 said boards, and members may engage in other occupations
6 or businesses, private or governmental, to an extent not
7 inconsistent with the performance of their duties, and may
8 hold other offices or positions under the United States and
9 receive compensation therefor. Any active or retired officer
10 of the armed forces, the Coast and Geodetic Survey, and
11 the Public Health Service may serve as a member of an
12 advisory board without prejudice to his commissioned status
13 as such officer, notwithstanding the provisions of law codified
14 in the United States Code, 1940 edition, title 10, section
15 576, or title 5, section 59 (a) or 62, or any other statute;
16 no retired officer shall be deemed to have been placed on
17 active status by reason of service on an advisory board.

18 (c) The Commission and the Administrator shall ad-
19 vise and consult with such advisory boards as may have
20 been established, on matters within their respective spheres
21 of interest, and the boards may make such recommendations
22 to the Commission or the Administrator relating to legisla-
23 tion, policies, procedures, administration, and research as
24 they may deem desirable in the performance of their
25 functions.

1 GENERAL POWERS OF THE COMMISSION AND OF THE

2 ADMINISTRATOR; DELEGATION OF AUTHORITY

3 SEC. 5. (a) In the performance of its functions, the
4 Commission is authorized—

5 (1) to make and modify agreements, arrange-
6 ments, and contracts (including where deemed advis-
7 able cost-plus-fixed-fee contracts but not cost-plus-a-
8 percentage-of-cost contracts), upon such terms and con-
9 ditions and in such manner as may be deemed necessary
10 to facilitate the purposes of this Act, without regard to
11 the provisions of law relating to the making, perform-
12 ance, amendment, or modification of contracts;

13 (2) to make advance, partial, and other payments
14 in connection with contracts;

15 (3) from time to time, to adopt and amend such
16 rules and regulations as may be necessary to carry out
17 the provisions of this Act, which shall be published in
18 the Federal Register where deemed by the Commission
19 to be of general application and where not inconsistent
20 with considerations of national defense or military
21 security;

22 (4) to bring suit in its own name, or in the name
23 of the United States, in any court, State or Federal,
24 of competent jurisdiction;

1 (5) to acquire, purchase, lease, and hold real and
2 personal property as agent of and on behalf of the
3 United States, and to sell, lease, grant, and dispose of
4 such real and personal property as provided in this Act;

5 (6) to exercise, in the name and on behalf of the
6 United States, the rights of eminent domain and requi-
7 sition as provided in this Act;

8 (7) to create or organize corporations, the stock
9 of which shall be wholly owned by the United States
10 and controlled by the Commission, to carry out the
11 provisions of this Act;

12 (8) to exercise the duties and authorities of the
13 head of a department of the Government respecting
14 the making of a certificate in the manner and for the
15 purpose provided in section 4894 of the Revised Stat-
16 utes as amended (U. S. C., 1940 edition, title 35,
17 sec. 37) ;

18 (9) to take all such other action and exercise all
19 such other powers as may be necessary or appropriate
20 for the exercise of the powers and performance of the
21 functions provided in this Act.

22 (b) In the performance of his functions, and subject
23 to the supervision and direction of the Commission, the Ad-
24 ministrators shall also have the powers and authority pro-

1 vided in subsections (a) (1), (2), (4), (5), (6), (8),
2 and (9) hereof.

3 (c) The Administrator may delegate any power and
4 authority conferred upon him by or pursuant to this Act,
5 except that provided in subsections (a) (4), (6), and (8)
6 hereof and that provided in section 11, to any qualified
7 officer, or employee of the Commission, the Adminis-
8 trator, or any other Government agency, and may authorize
9 successive redelegations of such power and authority to such
10 personnel: *Provided*, That any delegation by the Admin-
11 istrator of power and authority to purchase, acquire, or sell
12 real property shall be specific in terms. Nothing in this
13 subsection (c) shall restrict the Administrator's powers of
14 delegation to the Deputy Administrator as provided in
15 section 3 (b).

16 TRANSFER OF CERTAIN GOVERNMENT PROPERTY, AND OF
17 CERTAIN RIGHTS IN OTHER GOVERNMENT PROPERTY,
18 TO THE COMMISSION

19 SEC. 6. (a) There are hereby transferred into the cus-
20 tody and control of the Commission the following property
21 owned by the United States or any of its agencies, or any
22 interest in such property held in trust for or on behalf of
23 the United States:

24 (1) All stocks of the ores or other materials from

1 which the substances known as thorium, uranium (in-
2 cluding uranium enriched as to one of its isotopes), and
3 elements higher than uranium in the periodic table, can
4 be refined or produced;

5 (2) All plants, facilities, equipment, and materials
6 for the refining, or production, or for the utilization, in
7 any form, of the substances described in subsection
8 (a) (1) ;

9 (3) All stocks, on hand or in process, of the sub-
10 stances described in subsection (a) (1) ;

11 (4) All processes and technical information of any
12 kind, and the sources thereof (including data, drawings,
13 specifications, patents, patent applications, and other
14 sources), relating to the refining, production, or utiliza-
15 tion of the substances described in subsection (a) (1) ;

16 (5) All contracts, agreements, leases, patents,
17 applications for patents, inventions and discoveries
18 (whether patented or unpatented), and other rights of
19 any kind concerning any items of the types of property
20 described in subsections (a) (1) to (a) (4) ;

21 (6) All property in the custody and control of the
22 Manhattan Engineer District, Army Service Forces,
23 Army of the United States.

24 (b) (1) The Commission, and the Administrator, their
25 agents, and persons licensed for that purpose under section

1 11, shall hereafter have the exclusive right, with respect to
2 Government-owned deposits and land (public and acquired),
3 (A) to prospect and explore for, and to mine and remove
4 deposits from which there can be refined or produced appre-
5 ciable quantities (as defined from time to time by regulations
6 of the Commission) of substances described in subsection (a)
7 (1), or of substances to which the application of this para-
8 graph is extended pursuant to paragraph (2) of this subsec-
9 tion, and no person may hereafter acquire any such right
10 under any other law; and (B) to protect, preserve, and
11 guard any such deposits whenever the right so to do is re-
12 quested by the Commission or the Administrator. The Com-
13 mission or the Administrator shall give reasonable advance
14 notice to the head of the Government agency having juris-
15 diction over the land or deposits of the intention to exer-
16 cise any of the foregoing rights. All Government-owned
17 deposits and lands (public and acquired) shall, except as
18 herein provided, continue to be administered and disposed
19 of under the laws applicable thereto, but hereafter all patents,
20 conveyances, grants, leases, and other transfers of any right,
21 title, or interest in or to any such deposits or lands shall
22 reserve to the United States, for its benefit and the benefit
23 of its agents, assigns, and persons licensed for that purpose
24 under section 11, the exclusive right to prospect and explore
25 for, and to mine and remove deposits from which there can

1 be refined or produced appreciable quantities (as defined
2 from time to time by regulations of the Commission) of
3 substances described in subsection (a) (1) and of sub-
4 stances to which, at the time of the transfer, the application
5 of this paragraph has been extended pursuant to paragraph
6 (2).

7 (2) Whenever the Commission determines that any sub-
8 stance in addition to those described in subsection (a) (1)
9 is readily capable of or peculiarly related to transmutation
10 of atomic species, production of nuclear fission, or release of
11 atomic energy, it is authorized to extend the application of
12 paragraph (1) to such substance. Notice of such extension
13 shall be published in the Federal Register.

14 (3) Any person who suffers damage or injury to any
15 right, title, or interest which he has in or to any property,
16 occasioned by the exercise of any right granted or reserved
17 under paragraph (1), shall be entitled to receive compensa-
18 tion for such damage or injury, but such compensation shall
19 not include any payments on account of the deposits in ques-
20 tion. The Administrator is authorized to settle and pay
21 claims for such compensation.

22 (c) The President is authorized to provide, upon such
23 terms and conditions as he may prescribe (including terms
24 and conditions for reimbursement or nonreimbursement),
25 for the transfer to the control, possession, and use of the

1 Commission of such other property of the United States as
2 he may from time to time deem necessary and proper for
3 the purposes of the Commission.

4 POWER OF COMMISSION TO REQUIRE DECLARATIONS OF
5 CERTAIN PROPERTY, AND TO ACQUIRE, REQUISITION,
6 AND CONDEMN CERTAIN PROPERTY

7 SEC. 7. (a) All persons knowing or having reason to
8 believe that they have any right, title, interest, or claim in
9 or to any property of the following types, which the Commis-
10 sion has determined is peculiarly related to the transmutation
11 of atomic species, the production of nuclear fission, or the
12 release of atomic energy:

13 (1) ores, metals, minerals, and other substances or
14 materials;

15 (2) real property, plants, mines, facilities, and
16 equipment;

17 (3) technical information of all kinds;

18 (4) patents, applications for patents, inventions and
19 discoveries (whether patented or unpatented), and rights
20 thereunder; and

21 (5) contracts, agreements, leases, and rights;

22 shall at such time or times, in such form and manner, and
23 to such extent as the Commission or the Administrator may
24 prescribe, declare the same to the Commission.

25 (b) Whenever the Commission deems such action essen-

1 tial to the performance of its functions the Commission or
2 the Administrator is authorized, on behalf of and as agent of
3 the United States, to acquire or purchase, within the United
4 States or elsewhere, and to take, requisition, or condemn,
5 within the United States, as the case may be, any property
6 of a type with respect to which a declaration can be required
7 under subsection (a) of this section.

8 (c) In the performance of its functions under this Act,
9 the Commission is authorized to conduct, or to provide for
10 the conducting by the Administrator of, exploratory oper-
11 ations or investigations to determine the locations, extent, and
12 mode of occurrence of deposits of any ores, metals, minerals,
13 or substances, with or without the consent of any person hold-
14 ing any interest in the property so affected, but such persons
15 shall be entitled to receive compensation for any damage or
16 injury to their interests in such property, occasioned by the
17 exercise of the authority of the Commission or Administrator
18 under this subsection, and the Administrator may settle and
19 pay claims for such compensation.

20 COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

21 SEC. 8. (a) The United States shall make just compen-
22 sation for the personal property acquired, taken, or requisi-
23 tioned pursuant to section 7. The Commission shall de-
24 termine such compensation. If the compensation so de-
25 termined be unsatisfactory to the person entitled thereto,

1 such person shall be paid 90 per centum of the amount
2 so determined, and shall be entitled to sue the United
3 States to recover such further sum as added to said 90 per
4 centum will make up such amount as will be just compen-
5 sation.

6 (b) In the exercise of the rights of eminent domain and
7 condemnation, the Commission or the Administrator shall
8 cause proceedings to be instituted under the Act of August 1,
9 1888 (U. S. C., 1940 edition, title 40, sec. 257), or any
10 other applicable Federal statute. Upon or after the filing of
11 the condemnation petition, immediate possession may be
12 taken and the property may be occupied, used, and improved
13 for the purposes of this Act, notwithstanding any other law.
14 Real property acquired by purchase, donation, or other means
15 of transfer may also be occupied, used, and improved for the
16 purposes of this Act, prior to approval of title by the Attor-
17 ney General.

18 INVENTORIES OF PROPERTY

19 SEC. 9. Within three months after the enactment of this
20 Act, the Administrator shall compile a preliminary inventory
21 of the property of the United States subject to the jurisdiction
22 of the Commission, and shall prepare a complete inventory
23 as soon thereafter as possible. Every year thereafter the
24 Administrator shall compile supplementary inventories, indi-

1 eating all changes in such property. A copy of each inven-
2 tory compiled by the Administrator shall be submitted to
3 the President, and be transmitted by the President to the
4 Congress. The President before transmitting any such copy
5 to the Congress may omit therefrom any portions the omis-
6 sion of which he deems required in the interests of national
7 defense and military security, but the fact of each such
8 omission shall be noted on the copy so transmitted. Nothing
9 in this section shall affect the power of the Congress, or of
10 either House thereof, or of any standing or select committee
11 of either House thereof, or of any joint committee of the two
12 Houses thereof, to require the furnishing to it of the infor-
13 mation so omitted.

14 ACTIVITIES OF COMMISSION

15 SEC. 10. (a) The Commission is authorized to conduct,
16 or provide for the conducting by the Administrator of,
17 research and experimentation in the field of nuclear
18 fission, the transmutation of atomic species, and closely
19 related phenomena, and to proceed with the development
20 of any and all processes or methods for the release of atomic
21 energy, and for the exploitation and use thereof for military,
22 industrial, scientific, or medical purposes: *Provided, however,*
23 That it shall be the policy of the Commission and of the
24 Administrator, in accord with the objectives of this Act, to
25 utilize, encourage, and aid colleges, universities, scientific

1 laboratories, hospitals, and other governmental, nonprofit,
2 or private institutions equipped and staffed to conduct re-
3 search and experimentation in this field. The Commission
4 may also engage, or authorize the Administrator to engage,
5 in all such related activities as may be deemed necessary for
6 the proper performance of these functions. In performing
7 any of the functions under this section, the Commission and
8 Administrator may construct, establish, and operate all neces-
9 sary plants and facilities, may modify and use any or all of
10 the property available to the Commission, and may employ
11 such personnel as may be necessary. Without regard to
12 the civil-service laws or any other statute, the Commis-
13 sion and Administrator, may also arrange by contract or
14 otherwise, with other persons to engage in any of the fore-
15 going activities on behalf of the Commission, and subject
16 to its supervision.

17 (b) No other Government agency, except the armed
18 forces for military purposes in time of war or national emer-
19 gency and at the direction of the President, shall undertake or
20 engage in such activities without the consent of the Com-
21 mission or the Administrator and upon such conditions as
22 the Commission, or the Administrator with the approval
23 of the Commission, may prescribe.

24 (c) In the administration of this Act, the Commis-

1 sion, the Administrator, and their agents and licensees shall,
2 so far as feasible, protect and conserve all natural resources.

3 LICENSING OF THE COMMISSION'S PROPERTY

4 SEC. 11. (a) The Commission is authorized to license,
5 or to provide for the licensing by the Administrator of, any
6 or all of the property available to the Commission, without
7 regard to the provisions of the Surplus Property Act of 1944
8 or of any other statute, to any person or Government agency
9 for (1) research and experimentation in nuclear fission or
10 the transmutation of atomic species; (2) the development,
11 exploitation, and use of processes or methods for the release
12 of atomic energy; (3) any use of such property where it is
13 deemed advisable for the purposes of this Act to retain con-
14 trol or supervision in the Commission over the property; its
15 utilization, or disposition; or (4) any other purpose related
16 to the purposes of this Act, except that the Commission and
17 the Administrator shall not license any complete plant or
18 facility to any private person until sixty days after a full
19 report to the Congress of the intention to grant such license,
20 and the reasons therefor, shall have been made while the
21 Congress is in session. No such license for purposes (1),
22 (2), or (3) shall be given by the Commission or the Ad-
23 ministrator to a foreign government or any person who is not
24 under and within the jurisdiction of the United States, with-
25 out the approval of the President.

1 (b) The Commission is authorized to make grants or
2 loans of funds, or to provide for the granting or lending of
3 funds by the Administrator, for research, experimentation,
4 or development in nuclear fission, the transmutation of atomic
5 species, or the release of atomic energy.

6 (c) It shall be a condition of all licenses given, and
7 grants and loans made, pursuant to this section that the
8 holder, grantee, or borrower shall file with the Commission
9 such reports concerning the use of the licensed property or
10 the grants or loans, and related matters, as the Administrator
11 or the Commission may require. The Commission may im-
12 pose, or authorize the Administrator to impose, such other
13 terms and conditions upon the licensee, grantee, or borrower
14 as may be deemed advisable and appropriate in the national
15 interest, and as are in accord with the policies set forth in
16 sections 1 and 3 (a).

17 (d) In the performance of their functions under this
18 section and section 13, the Commission and the Adminis-
19 trator shall adopt the policy of (1) widespread distribution,
20 so far as feasible, of such licenses, grants, loans, and consents
21 on equally equitable terms to all qualified persons, and (2)
22 discouraging the growth of monopoly, restraint of trade, and
23 unlawful competition in the trades and industries affected
24 by such licenses, grants, loans, and consents. The Commis-

1 sion and the Administrator shall promptly report to the At-
2 torney General any evidence which they may have (1) of
3 the use of property licensed or of grants or loans made under
4 this section or (2) of action under any consent granted under
5 section 13, which fosters monopoly, restraint of trade, or
6 unlawful competition.

7 DISPOSAL OF SURPLUS PROPERTY

8 SEC. 12. Whenever the Commission determines that
9 control over any property of the United States of which
10 the Commission has jurisdiction, or that the disposition of
11 such property under section 10 or 11, is no longer neces-
12 sary to carry out the purposes and provisions of this Act,
13 it shall report such property to the appropriate Govern-
14 ment agency concerned with the utilization and disposi-
15 tion of such property, and shall turn over or dispose of
16 such property pursuant to the orders of such agency: *Pro-*
17 *vided*, That the Commission shall itself be authorized (with-
18 out regard to the Surplus Property Act of 1944 or any
19 other statute) to sell or return any real or personal prop-
20 erty, on such terms and conditions as it deems proper, to
21 the person from whom such property was acquired, and
22 his heirs or assignees, or to the present occupants or holders
23 of such property: *And provided further*, That the Commis-
24 sion shall return any such property to the Government
25 agency from which it was acquired.

CONTROL OF PRIVATE ACTIVITIES

SEC. 13. (a) It shall be unlawful for any person without the consent of the Administrator and upon such conditions as he, with the approval of the Commission, may prescribe—

(1) to refine, produce, or process any appreciable quantity, as defined by regulations of the Commission, of the substances described in section 6 (a) (1) or any ores or materials known to be capable of producing such substances;

(2) to use, process, manufacture, or utilize, in any manner, any appreciable quantity, as defined by regulations of the Commission, of the substances described in section 6 (a) (1).

(b) It shall be unlawful for any person to export from or import into the United States ores or other materials containing any appreciable quantity, as defined by regulation of the Commission, of the substances described in section 6 (a) (1), or such substances, for any purpose, until after application has been made to the Administrator and the Administrator's consent has been obtained, including in such application a sworn statement as to the quantity, destination, consignee, and intended use of the material being exported or imported, together with such other information as the Commission may require. The Commission may pro-

1 hibit or condition the exportation or importation of the mate-
2 rials described above in such manner as it finds to be required
3 by the policies and purposes of the Act.

4 (c) The Commission is authorized to extend the provi-
5 sions of subsections (a) or (b) to any other metal or sub-
6 stance determined by the Commission to be readily capable of
7 or peculiarly related to the transmutation of atomic species,
8 the production of nuclear fission, or the release of atomic
9 energy. Notice of such extensions shall be published in the
10 Federal Register.

11 (d) (1) It shall be unlawful for any person to conduct
12 research in the field of nuclear energy, or in other fields
13 employing the results or methods of research in that field,
14 involving the release of actual amounts of atomic energy
15 which constitute a national hazard, or are of military or in-
16 dustrial value, without the consent of the Administrator, and
17 upon such conditions as the Administrator, with the approval
18 of the Commission, may prescribe.

19 (2) Nothing in this section or in section 16 (3) shall
20 prohibit, or shall subject to the jurisdiction of the Commission
21 or the Administrator, the conducting or disclosure by private
22 persons of research in the field of nuclear energy, or in other
23 fields employing the results or methods of research in that
24 field, unless the release of actual amounts of atomic energy

1 involved in such research constitutes a national hazard or is
2 of military or industrial value.

3 (e) The Administrator and the Commission shall have
4 plenary authority to direct, supervise, regulate, and inspect
5 the activities with respect to which consent has been granted,
6 to the extent necessary to enforce compliance with the con-
7 ditions which have been prescribed in connection with the
8 granting of consent to such activities.

9 REPORTS

10 SEC. 14. As soon as practicable after the close of each
11 fiscal year, the Commission shall submit to the President (a)
12 reports concerning the matters within its jurisdiction and the
13 exercise of its authority under this Act, and (b) financial
14 statements of the Government operations and activities sub-
15 ject to its jurisdiction. The President shall transmit a copy
16 of each report and statement to the Congress. The President
17 before transmitting any such copy to the Congress may omit
18 therefrom any portions the omission of which he deems re-
19 quired in the interests of national defense and military
20 security, but the fact of each such omission shall be noted on
21 the copy so transmitted. Nothing in this section shall affect
22 the power of the Congress, or of either House thereof, or
23 of any standing or select committee of either House thereof,
24 or of any joint committee of the two House thereof, to require
25 the furnishing to it of the information so omitted.

1 VOLUNTARY PAYMENTS TO STATES AND LOCALITIES

2 SEC. 15. In order to render financial assistance to those
3 States and local governments in which the activities of the
4 Commission are carried on and in which the Commission, or
5 its agents, have acquired properties previously subject to
6 State and local taxation, the Commission is authorized to
7 make payments to States and local governments in lieu of
8 such taxes. Such payments may be in the amounts, at the
9 times, and upon the terms the Commission deems appro-
10 priate, but the Commission shall be guided by the policy of
11 not exceeding the taxes which would have been payable
12 for such property in the condition in which it was acquired,
13 except where special burdens have been cast upon the State
14 or local government by activities of the Commission, the
15 Administrator, the Manhattan Engineer District, or their
16 agents, and in such cases any benefits accruing to the States
17 and local governments by reason of these activities shall be
18 considered in the determination of such payments. The
19 Commission and any corporation created by it, and the
20 property and income of the Commission or of such corpora-
21 tions, are hereby expressly exempted from taxation in any
22 manner or form by any State, county, municipality, or any
23 subdivision thereof.

24 SECURITY REGULATIONS

25 SEC. 16. Insofar as required by the national defense

1 or by considerations of military security, the Commission
2 is authorized and directed to establish, and to provide for
3 the administration of, security regulations governing the col-
4 lection, classification, dissemination, publication, transmis-
5 sion, handling, and communication by any person of in-
6 formation, data, documents, equipment, and material of any
7 kind relating to or connected with research on the transmu-
8 tation of atomic species, with the production of nuclear fission,
9 or with the release of atomic energy, in all cases where such
10 information, data, documents, equipment, or material have
11 at any time, before or after the passage of this Act, been
12 entrusted to, or come into the knowledge or possession of,
13 any such person (1) by reason of his official duties, or (2)
14 pursuant to a contract with or license from, or in the course
15 of employment by, the Commission, the Administrator, any
16 other Government agency, their agents, contractors, or
17 licensees, or (3) in connection with activities governed by
18 section 13.

19 GENERAL PENALTIES

20 SEC. 17. (a) Any willful violation or any willful at-
21 tempt to violate, or any conspiracy to violate, any of the
22 provisions of this Act, or of the terms or conditions of any
23 license or consent authorized hereunder, except as provided
24 in section 18, shall be punishable by a fine of not more than

1 \$100,000 or by imprisonment for a term of not exceeding
2 ten years, or both.

3 (b) On application by the Commission or the Admin-
4 istrator, any court of competent jurisdiction is authorized
5 to, and shall, grant injunctive or other appropriate affirmative
6 relief against any violation of any of the provisions of this
7 Act, or of any rule, regulation, license, or consent authorized
8 hereunder.

9 PENALTIES FOR SECURITY VIOLATIONS

10 SEC. 18. (a) Any willful or grossly negligent violation
11 of any security regulation promulgated by the Commission
12 pursuant to section 16 shall, in addition to any other penal-
13 ties, be ground for dismissal from employment by the Com-
14 mission or the Administrator, or for dismissal, at the direc-
15 tion of the Administrator, from employment in connection
16 with activities governed by this Act by other Government
17 agencies, or the agents, holders of consents, or licensees of
18 the Commission, the Administrator, or other Government
19 agencies, without regard to criminal prosecution or convic-
20 tion thereunder.

21 (b) Any violation of security regulations promulgated
22 by the Commission pursuant to section 16 of this Act
23 shall be punishable by a fine of not more than \$500 or, if
24 willful or through gross negligence, shall be punishable by a
25 fine of not more than \$10,000 or by imprisonment for a

1 term not exceeding five years, or both. An attempt to
2 violate or a conspiracy to violate security regulations pro-
3 mulgated by the Commission pursuant to section 16 of this
4 Act shall be punishable in the same manner.

5 (c) Whoever, lawfully or unlawfully, having posses-
6 sion of, access to, control over, or being entrusted with any
7 information, data, documents, equipment, or material of
8 any kind relating to or connected with research on the
9 transmutation of atomic species, with the production of
10 nuclear fission, or with the release of atomic energy, with
11 the intent to jeopardize the interests of the United States,
12 or with reason to believe that his act will have such conse-
13 quences, communicates or transmits, or attempts or con-
14 spires to communicate or transmit the same to any person
15 not entitled to receive it, shall be punished by a fine of not
16 more than \$300,000 or by imprisonment for a term of
17 not exceeding thirty years, or both.

18 DEFINITIONS

19 SEC. 19. As used in this Act—

20 (a) The term "Government agency" means any execu-
21 tive department, board, bureau, commission, or other agency
22 in the executive branch of the Federal Government, or any
23 corporation wholly owned (either directly or through one or
24 more corporations) by the United States.

25 (b) The term "person" means any individual, corpora-

1 tion, partnership, firm, association, trust, estate, political
2 entity, public or private institution, group, or other entity.

3 (c) The term "material" includes any article, com-
4 modity, substance, machinery, accessory, equipment, part,
5 component, assembly, work in process, maintenance, repair
6 and operating supplies, and any product of any kind.

7 (d) The term "United States" includes all Territories
8 and possessions of the United States.

9 (e) The term "license" includes license, lease, loan,
10 sell, furnish, make available, dispose, grant any right or
11 interest.

12 (f) The term "property" includes real property (in-
13 cluding all interests in or pertaining thereto), personal prop-
14 erty, intangible property, plants, equipment, and materials.

15 (g) The term "agent" of the Commission or of the
16 Administrator includes corporations created by the Com-
17 mission, contractors with the Commission or the Adminis-
18 trator, and other agents.

19 APPROPRIATIONS

20 SEC. 20. There are hereby authorized to be appropriated
21 such sums as may be necessary and appropriate to carry out
22 the provisions and purposes of this Act. So much of the
23 unexpended balances of appropriations, allocations, or other
24 funds available for the use of the Manhattan Engineer Dis-
25 trict, Army Service Forces, and all records and all outstand-

1 ing obligations thereof, shall be transferred to the Com-
2 mission for use in connection with the exercise of any of the
3 functions authorized by this Act.

4 SEPARABILITY OF PROVISIONS

5 SEC. 21. If any provision of this Act, or the application
6 of such provision to any person or circumstances, is held
7 invalid, the remainder of this Act or the application of such
8 provision to persons or circumstances other than those to
9 which it is held invalid, shall not be affected thereby.

10 SHORT TITLE

11 SEC. 22. This Act may be cited as the "Atomic Energy
12 Act of 1945".

79TH CONGRESS
1ST Session

H. R. 4566

A BILL

For the development and control of atomic
energy.

By Mr. May

NOVEMBER 1, 1945

Referred to the Committee on Military Affairs

ATOMIC ENERGY ACT OF 1945

NOVEMBER 5, 1945.—Committed to the Committee of the Whole House on the state of the Union and ordered to be printed

Mr. MAY, from the Committee on Military Affairs, submitted the following

REPORT

[To accompany H. R. 4566]

The Committee on Military Affairs, to whom was referred the bill (H. R. 4566) for the development and control of atomic energy, having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

The bill deals with the domestic development and control of atomic energy. On October 3, 1945, the President transmitted a message to the Congress concerning the atomic bomb and atomic energy, and requesting the Congress to enact legislation fixing a policy and establishing an agency for the domestic development and control of atomic energy (H. Doc. 301, 79th Cong.).

On the same date the Secretary of War submitted to the Speaker the following letter, enclosing a draft of a bill for the development and control of atomic energy, and setting forth reasons for its prompt enactment:

OCTOBER 3, 1945.

The SPEAKER,
House of Representatives.

DEAR MR. SPEAKER: There is enclosed herewith a draft of a bill for the development and control of atomic energy. This bill is offered pursuant to the President's message to Congress today and is consistent with this message and with the policies announced by the President therein. The bill was prepared by the Interim Committee appointed by the Secretary of War with the approval of the President. The Committee devoted months of study to the question of how best to secure for the Nation adequate control over this unprecedented development. It consulted with other interested Government departments and had the benefit of the views of the leading physicists and the representatives of those industries most closely connected with the development of the atomic bomb. As now submitted, therefore, the bill embodies the consensus of the Committee, the interested departments, and the scientists and the representatives of industries most directly involved in the program. The War Department strongly recommends that the bill be enacted into law as promptly as possible.

The purpose of the proposed legislation is to provide for the continuing national supervision of the control and development of atomic energy, and to establish proper national policy with respect to this newest source of power. To this end, the draft declares that all activities connected with the release of atomic energy shall be conducted in the interest of the Nation and world peace so as to promote the national defense, protect the safety of our inhabitants, safeguard world peace, and further the acquisition of knowledge in this field. Jurisdiction is vested in an Atomic Energy Commission of nine members appointed by the President, with the advise and consent of the Senate, to serve for 9 years. Members of the Commission are not expected to devote their full time to the work of the Commission and may hold other offices and engage in other occupations; they are to receive only a per diem allowance and their expenses. The Commission is expected to exercise plenary supervision over all atomic energy activities. For the actual day-to-day administration of the act, there is provided a full-time Administrator and Deputy Administrator with salaries of \$15,000 and \$12,000, respectively. To aid the Commission and the Administrator, the President is empowered to establish and appoint such advisory board as he deems proper. The Commission and the Administrator are authorized to engage such employees as are necessary, without reference to the civil-service laws. The proposed bill also grants to the Commission full general powers necessary to the performance of its functions, such as the right to adopt regulations, to make contracts without regard to other statutory provisions, to bring suit, to acquire property by purchase or eminent domain, and to create corporations to carry out the provisions of the act. Except for the right to create corporations and the power to issue regulations, similar general powers are conferred upon the Administrator.

All items of Government-owned property relating to the production of atomic energy, including stock piles of the ores and materials forming the currently usable sources of this power, together with the plants and other property of the Manhattan engineer district, are transferred to the Commission. All rights in substances found in Government-owned lands which are directly connected with the release of atomic power, as determined by the Commission, are forever vested in the United States, and such lands or deposits are to be turned over to the Commission at its request. The Commission is also authorized to require private persons to declare any property now or hereafter determined to be directly connected with atomic energy, and to acquire such property, at a fair price, by purchase or eminent domain.

With the property thus coming into its custody, the Commission is empowered, through its own employees and agents or through contractors, to conduct all necessary research and experimentation in this field, to develop processes for the release of atomic energy and for its use for military, industrial, scientific, or medical purposes. To this end, the Administrator may license or dispose of the Commission's property to other Government agencies or private persons, upon appropriate terms and conditions which may be prescribed in the public interest. As a necessary corollary to the power of supervision which comes to the Commission through its jurisdiction over Government property, the proposed bill also grants to the Commission full control over the use, processing, export, and import, by private persons, of all substances determined to be sources of or directly connected with atomic energy. In the licensing of its property and the control of private activities, the proposed bill expressly imposes upon the Commission the policy of minimum interference with and the encouragement of private research and of employing other Government agencies, educational institutions, and private enterprise to the maximum extent consistent with the accomplishment of the objectives of the act. The Commission is also enjoined to encourage the widespread distribution, so far as feasible, of permission to engage in activities subject to its jurisdiction, and to discourage the growth of monopoly in trades and industries affected by these activities.

The proposed legislation also authorizes the Commission to adopt and administer the necessary security regulations, and provides suitably strict penalties for their violation. Penalties for violation of the other provisions of the act and regulations thereunder are also established.

Finally, the proposed bill includes provisions for reports to the President and Congress, for voluntary payments to States and municipalities in lieu of taxes, for the transfer to the Commission of the appropriations now available to the Manhattan engineer district, and for a limited exception from General Accounting Office review.

I urge the immediate enactment of such a statute as a prime necessity now that the war period is drawing to its close. Such legislation will both permit the uninterrupted continuance of the activities which are now being carried on in the

field of atomic power and will also provide for the necessary domestic central supervision of the use and development of this newly tapped source of energy. As section 1 of the proposed bill states, "the misuse of such energy, by design or through ignorance, may inflict incalculable disaster upon the Nation, destroy the general welfare, imperil the national safety, and endanger world peace." On the other hand, "the proper development and utilization of such energy will advance the national welfare, secure the national defense, insure the national safety, and promote world peace, to an extent and by means which cannot now be measured." The agency entrusted with the internal control of power of such unlimited potentialities must have broad and sweeping authority to promote the constant development of the peaceful uses of atomic energy, and, at the same time, to control every phase of its use so that enemies and incompetence, foreign and domestic, do not bring disaster upon the Nation.

Respectfully,

ROBERT P. PATTERSON, *Secretary of War*.

On the same date as the above letter from the Secretary of War the chairman introduced the bill so submitted. That bill had the number H. R. 4280.

The committee held public hearings, on October 9 and 18, 1945, on the bill that had been so introduced, and after considering the bill in executive session extending over a period of approximately 3 weeks adopted extensive amendments thereto, and requested the chairman to introduce a bill embodying the provisions of H. R. 4280 as so amended. Such a bill was introduced on November 1, 1945, and it is that bill (H. R. 4566) which is herewith reported.

PURPOSES OF BILL

The bill has five principal purposes, each one being of the utmost importance:

(1) To centralize in one agency of the Government control over all Government property now used in connection with nuclear fission.

(2) To give this agency of the Government, subject to the purposes described in (3) and (4) below, plenary supervision and control over all fissionable substances, and also over all uses of atomic energy in quantities involving a national hazard or of military or industrial value.

(3) To promote the development, exploitation, and use of processes and methods for the release of atomic energy for industrial and other civilian purposes, and to provide for widespread distribution of licenses under section 11 for this purpose.

(4) To encourage research in the field of nuclear energy and in related fields, and to avoid interference with private research in these fields.

(5) To avoid interfering with the status quo in relation to the secrets of the atomic bomb, and at the same time to give authority to prevent disclosure of such secrets by persons who acquired their information through their connection with the atomic-bomb project.

MAJOR DIFFERENCES BETWEEN ORIGINAL BILL AND BILL HEREWITH REPORTED

Since the legislation must deal with a tremendous new form of energy, the misuse of which might bring incalculable disaster upon the Nation, under the original bill (H. R. 4280) the Commission and the Administrator were given vast powers to control the use and

further development of this new form of energy, to control the materials necessary in connection therewith, to control research requiring the use of such materials, and to prevent the disclosure of secret data in the interests of national security.

The bill which is herewith reported differs from the bill (H. R. 4280) originally introduced in two important respects:

(1) Under the original bill (H. R. 4280) vast powers were conferred upon the Administrator, who under the bill is appointed by the Commission itself, rather than by the President, with the advice and consent of the Senate. Under the bill herewith reported, the powers are conferred on the Commission, rather than the Administrator, and the Commission is authorized to delegate certain of these powers to the Administrator. Thus the power and the responsibility is vested in officials appointed with the advice and consent of the Senate, instead of in one man not so appointed.

(2) Under the original bill (H. R. 4280) private research with respect to nuclear fission and related subjects, and the publication of the results thereof, was construed by many to be completely subject to the jurisdiction and control of the Commission. Under the bill herewith reported, it is declared to be the policy of the United States to encourage free research in the field of nuclear energy and in related fields, and the Commission is directed to adopt the policy of (A) full encouragement of such research, and (B) noninterference with the conducting and disclosure by private persons of research in these fields. Furthermore, it is provided that (1) the prohibitions with respect to the production and utilization of fission substances without the consent of the Commission, and (2) the power of the Commission to prescribe security regulations governing the disclosure of information secured pursuant to any such consent, are not to be deemed to make subject to the Commission's jurisdiction the conducting or disclosure by private persons of research in the field of nuclear energy or related fields, unless the release of actual amounts of atomic energy involved in such research constitutes a national hazard or is of military or industrial value.

NEED FOR DOMESTIC LEGISLATION

In his message to the Congress on October 3, 1945, the President pointed out the tremendous significance of the discovery of the means of releasing atomic energy in large quantities. He emphasized the need for proceeding along both the domestic and the international fronts, but stressed the urgency of first determining our domestic policy for the control, use, and development of atomic energy within the United States:

The discovery of the means of releasing atomic energy began a new era in the history of civilization. The scientific and industrial knowledge on which this discovery rests does not relate merely to another weapon. It may some day prove to be more revolutionary in the development of human society than the invention of the wheel, the use of metals, or the steam or internal combustion engine.

Never in history has society been confronted with a power so full of potential danger and at the same time so full of promise for the future of man and for the peace of the world. I think I express the faith of the American people when I say that we can use the knowledge we have won, not for the devastation of war, but for the future welfare of humanity.

To accomplish that objective we must proceed along two fronts—the domestic and the international.

The first and most urgent step is the determination of our domestic policy for the control, use, and development of atomic energy within the United States.

We cannot postpone decisions in this field. The enormous investment which we made to produce the bomb has given us the two vast industrial plants in Washington and Tennessee, and the many associated works throughout the country. It has brought together a vast organization of scientists, executives, industrial engineers, and skilled workers—a national asset of inestimable value.

The powers which the Congress wisely gave to the Government to wage war were adequate to permit the creation and development of this enterprise as a war project. Now that our enemies have surrendered, we should take immediate action to provide for the future use of this huge investment in brains and plant. I am informed that many of the people on whom depend the continued successful operation of the plants and the further development of atomic knowledge are getting ready to return to their normal pursuits. In many cases these people are considering leaving the project largely because of uncertainty concerning future national policy in this field. Prompt action to establish national policy will go a long way toward keeping a strong organization intact.

It is equally necessary to direct future research and to establish control of the basic raw materials essential to the development of this power whether it is to be used for purposes of peace or war. Atomic force in ignorant or evil hands could inflict untold disaster upon the Nation and the world. Society cannot hope even to protect itself—much less to realize the benefits of the discovery—unless prompt action is taken to guard against the hazards of misuse.

I therefore urge, as a first measure in a program of utilizing our knowledge for the benefit of society, that the Congress enact legislation to fix a policy with respect to our existing plants, and to control all sources of atomic energy and all activities connected with its development and use in the United States.

After outlining the nature of the legislation needed for domestic control (which fully accords with the bill reported herewith) the President discussed the international aspects of the problem. He concluded, however, with the following emphatic restatement of the immediate need for domestic legislation, regardless of undertakings in the international sphere:

But regardless of the course of discussions in the international field, I believe it is essential that legislation along the lines I have indicated be adopted as promptly as possible to insure the necessary research in, and development and control of, the production and use of atomic energy.

The committee agrees that legislation for the internal control of atomic energy is vitally necessary, and can be enacted without touching upon the significant international problems raised by the development of the atomic bomb and the large scale release of atomic energy which first occurred at Hiroshima and Nagasaki.

INTERNATIONAL PHASES NOT COVERED

The bill (H. R. 4566) concerns only the domestic control and utilization of atomic energy, and does not invade the international sphere. The bill sets down no policy, and is intended to set down no policy concerning international control or lack of control of atomic energy. There is no provision in the bill which will prevent or hinder the United States from adopting any international policy which is hereafter deemed proper. It is entirely neutral on the international issues with which so many people are now concerned.

As for such secrets of the atomic bomb as may now be in the sole possession of the United States, the bill also does not change the status quo. It is provided (sec. 11 (a)) that such information cannot be revealed by the Commission to a foreign government or a person

not under the jurisdiction of the United States without the approval of the President. Furthermore, persons who are under the jurisdiction of the United States and who have such information can be prevented from revealing such information by security regulations promulgated under section 16. Thus the present situation is not altered. If it is later decided by the appropriate authority and through the proper mechanisms either that the withheld technical information should be made available, or that it should not be made available, to other nations or to the United Nations Organization, the proposed legislation will present no obstacle whatever.

CHARACTER OF COMMISSION

The committee considered the desirability of having a part-time Commission as distinguished from a Commission whose members would be required to devote their whole time to Commission duties. It is absolutely essential that in the control of the utilization and development of this tremendous new form of energy the United States be able to secure the services of the ablest and most outstanding persons available. Persons of this caliber will, of course, be leaders in their particular fields of endeavor—be it scientific, industrial, or otherwise.

It will be difficult, if not impossible, to command their services on a full-time basis; and, even if it were possible, it would not be desirable since they would be required, on such a basis, to abandon the very work, the continued doing of which, and their continuing familiarity with which, makes their services valuable to the United States in connection with the activities covered by the bill. Hence the committee bill provides for a part-time Commission rather than a full-time Commission.

SUMMARY AND EXPLANATION OF PROVISIONS

SECTION 1. FINDINGS AND DECLARATION OF POLICY

Section 1 summarizes the reasons why it is essential to develop fully the new strength and to promote the enrichment of the national life that can come from knowledge and practical use of atomic energy.

The policy of the United States is declared to be (A) encouragement of free research relating to atomic or nuclear energy and the furtherance of the practical application of such research, and (B) control of the substantial sources of atomic energy and activities concerned with the release and utilization of atomic energy on a scale constituting a national hazard or of military or industrial value. The primary objectives of action taken to fulfill the foregoing policy are stated to be the promotion of the national defense, the protection of the safety of the inhabitants of the United States, the preservation of world peace, the enrichment of the national life, the promotion of the general welfare, and the furtherance of the acquisition of knowledge concerning atomic energy.

SECTION 2. THE ATOMIC ENERGY COMMISSION; ADMINISTRATOR

Subsection (a) establishes an Atomic Energy Commission of nine members, appointed by the President by and with the consent of the Senate for 9 years, with staggered terms. The members can be re-

moved only for inability to act, neglect of duty, malfeasance, conflict of interests, or because continuance in office would be inimical to the national interest. The Chairman is designated by the President and six members constitute a quorum. The members receive no compensation but are entitled to a per diem allowance of \$50 plus their expenses; they may hold other offices and engage in other occupations not inconsistent with the performance of their duties; the general statutes prohibiting Government officials from prosecuting claims against or dealing with the Government are made inapplicable.

Subsection (b) provides that the Commission must meet at least four times each year.

Subsection (c) directs the Commission to appoint an Administrator and Deputy Administrator to serve at its pleasure. These officials are to receive \$15,000 and \$12,000 per year, respectively (plus traveling expenses), and are to engage in no other occupation or business.

While the bill does not direct that the members of the Commission be representative of any specified interests or groups, either military, scientific, industrial, or otherwise, it is necessary to provide that if the President sees fit to appoint any officer of the armed forces, the Coast and Geodetic Survey, or the Public Health Service, as a member of the Commission, or the Commission to appoint such an officer as Administrator or Deputy Administrator, such officer may serve without prejudice to his commissioned status. Accordingly, subsection (d) provides that officers of the armed forces, the Coast and Geodetic Survey, and the Public Health Service may serve on the Commission or as Administrator or Deputy Administrator, without prejudice to their commissioned status. Officers serving as Administrator or as deputy are to receive from the Commission the difference between their service pay and the statutory salary.

Subsection (e) authorizes the Commission and the Administrator to hire personnel without regard to the civil-service laws, and may make expenditures for supplies, etc., within the limits of appropriated funds.

SECTION 3. GENERAL AUTHORITY OF THE COMMISSION AND THE ADMINISTRATOR

Subsection (a) states that the Commission is to have plenary supervision and control over all matters committed to the jurisdiction of the Commission (including the Administrator) by the act. In all its activities and functions, the Commission is directed to follow the policy of (A) encouragement of free research relating to atomic or nuclear energy and of the practical application of such research, (B) noninterference with private research not involving the release of actual amounts of atomic energy which are deemed to be of military or industrial value or to constitute a national hazard, (C) minimum interference consistent with the accomplishment of the objectives of the act with other private research and other industrial activities, and (D) employing other Government agencies, educational and research institutions, and private enterprise to the maximum extent. The Commission is also directed to act consistently with the foreign and national defense policy of the United States, as such policies are communicated to them by the President.

Subsection (b) provides that, subject to the direction and supervision of the Commission, the Administrator is to be the actual day-to-day administrator of the act; all his powers and duties are, however, to be exercised and performed under or subject to the Commission's direction and supervision. The provisions of subsections (a) and (b) of section 3 make it clear that the Commission is supreme in regard to every matter covered by the act, and has full right and power to control the Administrator and the Deputy Administrator. The Deputy Administrator will also be engaged in day-to-day administration, for the most part deriving his powers from the Administrator.

The Deputy Administrator is given one statutory duty, however, namely, acting as Administrator in the absence of the Administrator or in the event of the inability of the Administrator to act. With this in view, the Administrator is required by the bill to keep the Deputy Administrator fully informed with respect to all matters, so that the Deputy may be equipped to perform efficiently this statutory duty.

Subsection (e) provides that other Government agencies are directed to cooperate with the Commission and to follow its directives. The Commission may utilize the services of employees of other agencies, either with the agency's consent or with the President's approval.

SECTION 4. ADVISORY BOARDS

Under subsection (a) the President is authorized to create such advisory boards as he deems appropriate to assist the Commission and the Administrator, and to prescribe the composition and duties of these boards.

Subsection (b) provides that members of the boards are to receive a per diem allowance of \$25 per day plus expenses; members may hold other offices and engage in other occupations; the general statutory provisions concerning prosecution of Government claims and dealing with the Government are made inapplicable; commissioned officers may be members without prejudice to their status as officers.

Subsection (e) requires the Commission and the Administrator to consult with the boards, and provides that the boards may make recommendations within the sphere of their interests.

SECTION 5. GENERAL POWERS OF THE COMMISSION AND OF THE ADMINISTRATOR; DELEGATION OF AUTHORITY

Subsection (a) provides that the Commission is authorized (1) to make contracts and agreements without regard to the provisions of law, in the same way in which such agreements were made under the First War Powers Act; (2) to make advance and other payments in connection with contracts; (3) to adopt regulations, which shall be published in the Federal Register if of general application and if their publication would not be inconsistent with military security considerations; (4) to bring suit; (5) to acquire and hold and to dispose of property, as provided in the act; (6) to exercise the rights of eminent domain and requisition; (7) to create or organize wholly owned Government corporations (this is similar to the power granted to the Reconstruction Finance Corporation and under which it created Defense Plant Corporation, etc.); (8) to make a certificate to the

Patent Office concerning the nonabandonment of Government-owned patent applications relating to national defense (this power may now be exercised only by the "head of any department of the Government"); (9) to take other necessary and proper action.

Subsection (b) gives the Administrator (subject to the supervision and direction of the Commission) the above powers, except (3) (adoption of regulations), and (7) (creation of corporations).

Subsection (c) permits the Administrator to delegate his powers (except the power to bring suit, to requisition or condemn, to make the Patent Office certificate referred to above, and to license the Commission's property under sec. 11) to any qualified agent or employee and may authorize successive redelegations, but delegation of authority to acquire or sell real property must be specific in terms. There are no restrictions on delegations to the Deputy Administrator.

SECTION 6. TRANSFER OF CERTAIN GOVERNMENT PROPERTY AND OF CERTAIN RIGHTS IN OTHER GOVERNMENT PROPERTY TO THE COMMISSION

Subsection (a) transfers to the Commission all Government-owned property relating to atomic energy, including—

(1) ores from which thorium, uranium, plutonium, and neptunium can be processed;

(2) plants, facilities, equipment, and materials for this processing;

(3) stocks of these named atomic-energy-producing substances;

(4) processes and technical information relating to the processing and use of these substances;

(5) contracts, leases, patents, other rights, concerning any of the above items of property.

(6) all property of the Manhattan engineering district.

Subsection (b) concerns the Commission's rights in Government-owned lands and deposits, both public and acquired. Paragraph (1) provides that after the enactment of the act the Commission, the administrator, their agents and licensees shall have the exclusive right, with respect to Government-owned deposits and land (A) to explore for and mine deposits from which there can be produced appreciable quantities (as defined from time to time by the Commission) of the named atomic-energy-producing substances (thorium, uranium, plutonium, neptunium) or of other atomic-energy-producing substances which the Commission may hereafter determine, in accordance with the provisions of the act, and no person may acquire any such right under any other law; and (B) to protect, preserve, and guard such deposits wherever the right so to do is requested by the Commission or the Administrator. Due notice of intention to exercise any of these rights must be given to the Government agency having general jurisdiction of the land or deposits. Except as thus provided, all Government-owned land and deposits continue to be administered and disposed of under the laws applicable thereto, with the proviso that all land patents, conveyances, leases, and other transfers shall contain a reservation to the United States of the exclusive right to explore for and mine deposits from which there can be produced appreciable quantities of the atomic-energy-producing substances named in the act or declared by the Commission prior to the transfer.

Paragraph (2) of subsection (b) provides that the list of these atomic-energy-producing substances may be extended by the Commission to other substances determined to be readily capable of or peculiarly related to the transmutation of atomic species, the production of nuclear fission, or the release of atomic energy. Notice of such extensions must be published in the Federal Register.

Paragraph (3) provides that persons suffering property damage or injury through the exercise of the rights in Government-owned deposits and lands granted or reserved under paragraph (1) are entitled to receive compensation. The Administrator is authorized to settle and pay claims for such compensation, or the claimant may, of course, bring suit in the proper courts.

The effect of subsection (b) is to reserve to the Commission and its agents the exclusive right hereafter to mine deposits containing atomic-energy-producing substances now owned by the Government; after the enactment of the bill, no private rights to such deposits can be secured, by location or otherwise, under the mining laws. (Private rights vested prior to the enactment of the bill are not touched by this provision, and the Commission would have to acquire such vested private interests by purchase or condemnation.) As for Government lands hereafter conveyed or leased to private parties, the Government would always reserve similar exclusive rights to deposits containing atomic-energy-producing substances. Except insofar as necessary for the exercise by the Commission or its agents of these exclusive rights to mine (and the right to protect) atomic-energy-producing substances, all Government-owned lands would remain under their present jurisdiction, and would be as much available for grazing, mining, oil leases, etc., as they are under the present law. In addition, compensation would be made for all injuries or damage to private rights in public lands or deposits (e. g., grazing rights, oil rights, other mining rights) occasioned by the exercise of the Commission's rights to mine or protect atomic-energy-producing deposits.

Subsection (c) permits the President to prescribe the transfer to the Commission of other Government-owned property.

SECTION 7. POWER OF COMMISSION TO REQUIRE DECLARATIONS OF CERTAIN PROPERTY, AND TO ACQUIRE, REQUISITION, AND CONDEMN CERTAIN PROPERTY

Subsection (a) provides that all persons knowing or having reason to believe that they have any interest in the following types of property—

- (1) ores, minerals, metals, substances, materials;
- (2) real property, plants, mines, facilities, equipment;
- (3) technical information;
- (4) patents, inventions, etc.;
- (5) contracts, leases, rights,

which the Commission has determined is peculiarly related to the field of atomic energy, must declare it to the Commission upon request.

This subsection enables the Commission to discover what types of property peculiarly related to atomic energy exist in the United States, and also enables it at all times to keep itself informed of all American scientific and industrial advances and research in this

field, including small-scale or theoretical research over which it would not, under section 13 (d), have any other jurisdiction.

Subsection (b) authorizes the Commission and the Administrator to purchase, requisition (in the case of personal property), or condemn (in the case of real property) property of the type with respect to which a declaration might be required under subsection (a), if the Commission determines that the acquisition of such property is essential to the performance of its functions.

Subsection (c) authorizes the Commission, in the performance of its functions, to conduct investigations and exploratory operations to discover the location of ores and minerals. Compensation must be paid for any damage or injury occasioned thereby; the Administrator is authorized to settle and pay such claims, or the claimant may bring suit in the proper court.

SECTION 8. COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

Subsection (a). Just compensation must be made for personal property requisitioned. If the amount determined by the Commission is unsatisfactory to the claimant, he receives 90 percent and may sue the United States for the remaining sum needed to total an amount which will equal just compensation.

Subsection (b). As for real property, the Commission shall follow the available Federal statutes concerning condemnation, including the Declaration of Taking Act. Immediate possession may be taken.

SECTION 9. INVENTORIES OF PROPERTY

The Administrator is to make a preliminary inventory of the Commission's property within 3 months after passage of the act, and a complete inventory as soon thereafter as possible. Supplementary inventories are to be compiled annually. The President is to receive a copy of each inventory, and transmit it to the Congress, but, inasmuch as it becomes a public document when transmitted to Congress, he may omit such portions as he deems should be omitted in the interests of national defense and military security, noting the fact of each such omission on the copy transmitted to the Congress. It is also provided that nothing in this section affects the present powers of the Congress, or its committees, to require the furnishing of the omitted information.

SECTION 10. ACTIVITIES OF COMMISSION

This section deals with the carrying on of the Commission's activities, either through its own employees or through operating agents or contractors.

Under subsection (a), the Commission and the Administrator (upon delegation from the Commission) are authorized to conduct research in the field of atomic energy, to develop processes for the release of such energy and for its use for military, industrial, scientific, and medical purposes, and to engage in necessary related activities. They may perform these functions through employees, or through contractors or other agents. The last-mentioned provision permits the Commission to continue, if it desires, the Manhattan engineer

district's practice of using the services of management corporations for the operation on its behalf of Government plants in Tennessee, Washington, and elsewhere. For research, the policy shall be to utilize and encourage educational, research, and nonprofit institutions properly equipped and staffed.

Subsection (b) provides that no other Government agency shall engage in such activities without the consent of the Commission or the Administrator and subject to the conditions imposed by the Commission, except that the armed forces may do so in time of war or national emergency if so directed by the President.

Subsection (c) declares that in the administration of the act, all persons are required to protect and conserve all natural resources, so far as feasible.

H. R. 4280 (a bill for the development and control of atomic energy) as it was originally introduced, contained a provision (sec. 10 (c)) authorizing the Administrator to acquire property, by purchase or otherwise, construct buildings, and to provide or arrange for services, in order to promote the housing, health, and welfare of employees of the Commission or its agents; just compensation was to be paid for property so taken. The committee was of the opinion that the general powers given to the Commission were sufficient to authorize the making of appropriations for these purposes in proper cases. Hence this provision has been omitted from the bill herewith reported.

SECTION 11. LICENSING OF THE COMMISSION'S PROPERTY

This section deals with the use of the Commission's property by others than the Commission and agents acting on its behalf. The word "license" is defined in the act to include: License, lease, loan, sell, furnish, make available, dispose, grant any right or interest.

Subsection (a) authorizes the Commission and the Administrator (upon delegation from the Commission) to license the Commission's property for (1) research and experimentation, (2) development, exploitation, and use of processes for release of atomic energy, (3) any use where it is advisable to retain control over the property and its disposition, and (4) related purposes. No license for purposes (1), (2), or (3) can be granted to any foreign government or to any person not under and within the jurisdiction of the United States without the approval of the President. It is also provided that no complete plant or facility can be licensed to any private person until 60 days after a full report to the Congress of the intention to grant such license, and the reasons therefor, shall have been made while the Congress is in session.

The term "complete facility" is intended to cover entire establishments such as mines, factories, or other integrated manufacturing establishments.

This provision does not affect the power of the Commission under section 10 (a) to employ private corporations to operate and manage the Commission's plants and facilities, on its behalf, as is now done by the Manhattan engineer district.

Subsection (b) authorizes the Commission and the Administrator (upon delegation from the Commission), to make grants or loans of funds for research, experimentation, or development in the field of atomic or nuclear energy.

Subsection (c) provides that all licenses, grants, and loans shall be conditioned on the giving of such reports as may be required. There may also be imposed such other terms and conditions as may be advisable and appropriate in the national interest, and as accord with the policies stated in section 1 and 3 (a) of the bill.

Subsection (d) declares that in administering this section and section 13 (control of private activities), the Commission and the Administrator shall follow the policy of (1) widespread distribution, so far as feasible, of licenses, loans, and grants and permission to engage in activities subject to their jurisdiction, and (2) discouraging monopoly and restraint of trade in the industries affected by these activities. Reports are to be made to the Attorney General of any evidence of use of licenses, loans, or grants, so as to foster monopoly.

SECTION 12. DISPOSAL OF SURPLUS PROPERTY

If it is determined by the Commission (1) that control over any of the Commission's property is no longer necessary for the purposes of the act, and (2) that the Commission's property should not be licensed or otherwise disposed of for the purposes of the act, then such property is wholly surplus to the needs and responsibilities of the Commission and is to be turned over to the proper disposal agency. However, the Commission (i) is authorized to return property directly to the persons from whom it was acquired, and (ii) is required to return property to the Government agency from which it was acquired.

SECTION 13. CONTROL OF PRIVATE ACTIVITIES

This section provides for the control by the Commission of the private use, processing, export, or import of atomic-energy-producing substances. It is a necessary corollary to the power of supervision which the Commission has through its powers of licensing Government property (sec. 11).

Subsection (a). This subsection prohibits the refinement, production, processing, use, manufacture, and utilization of appreciable quantities (as defined by the Commission) of the atomic-energy-producing substances named earlier in the bill (uranium, etc.), without the consent of the Administrator and subject to the conditions imposed by the Commission. (In acting under this section, as in all activities, the Commission is required to follow the policies laid down in secs. 1 and 3 (a).)

Subsection (b). This subsection makes it unlawful to export or import appreciable quantities of the named substances without consent of the Administrator and subject to conditions imposed by the Commission.

Subsection (c). The Commission may extend the provisions of subsections (a) and (b) to other substances determined to be readily capable of or peculiarly related to the field of atomic energy. Notice of these extensions is to be published in the Federal Register.

Subsection (d). This subsection renders it unlawful to conduct research involving the release of atomic energy in amounts constituting a national hazard or being of military or industrial value, unless the consent of the Administrator has been obtained. Conversely, it is expressly provided that the conducting and disclosure by private persons of research not involving the release of actual amounts of atomic

energy constituting a national hazard or of military or industrial value is not prohibited and is not subject to the regulations of the Commission.

Subsection (c) provides that the Administrator and the Commission shall have authority to supervise and inspect, within the terms of the conditions which have been imposed, the activities subject to this section.

SECTION 14. REPORTS

This section provides for an annual report by the Commission to the President and like the section on Inventories of Property (sec. 9) requires the President to transmit the reports to the Congress, omitting such portions as he judges should be omitted in the interests of national defense and military security. The present rights of Congress and its committees to obtain the omitted information are not affected.

SECTION 15. VOLUNTARY PAYMENTS TO STATES AND LOCALITIES

The Commission is authorized to make payments in lieu of taxes. The established policy shall be not to exceed the taxes payable for the property in the condition in which it was acquired except where special burdens have been cast upon the State or locality. The property and income of the Commission and its corporations are exempt from State and local taxation.

SECTION 16. SECURITY REGULATIONS

Insofar as required by national defense or military security, the Commission shall establish and administer security regulations governing information, data, etc., relating to atomic energy, which has come into possession of any person (1) by reason of official duties, (2) by reason of a contract with or license from the Commission, or (3) in connection with private activities concerning atomic energy and governed by section 13 (control of private activities).

SECTION 17. GENERAL PENALTIES

Subsection (a) provides that willful violation of the act (except security provisions and regulations) or of the terms or conditions of any license or consent, is punishable by a fine of not more than \$100,000, and imprisonment for not exceeding 10 years, or both.

Subsection (b) authorizes the courts to grant affirmative or injunctive relief against violations of the act, regulations, licenses, and consents.

SECTION 18. PENALTIES FOR SECURITY VIOLATIONS

Subsection (a) provides that willful or grossly negligent violations of security regulations shall be grounds for dismissal from employment in connection with activities governed by the act, at the direction of the Administrator.

Subsection (b) provides that violations of security regulations, which are not willful or grossly negligent, are punishable by a fine of \$500. Willful or grossly negligent violations are punishable by a fine of \$10,000 or imprisonment for 5 years.

(In accordance with the general law of crimes, it is not intended that a violation of a security regulation can occur unless the accused has actual or constructive notice of the regulation; accordingly, there can be no violation of any regulation not published in the Federal Register, under sec. 5 (a) (3), unless such regulation has been properly brought to the actual attention of the accused.)

Subsection (c) provides that improper communication of atomic energy data, etc., with intent to jeopardize the interests of the United States or with reason to believe that the act will have such consequences, is punishable by a fine of \$300,000 or imprisonment for 30 years. This crime is akin to treason, and should be very severely punished.

SECTION 19. DEFINITIONS

The definitions define "Government agency," "person," "material," "United States," "license," "property," and "agent." Except for the definition of "license," the definitions are usual. "License" is defined to include license, lease, loan, sell, furnish, make available, dispose, grant any right or interest. The term "license" is primarily used in section 11 (licensing of the Commission's property).

SECTION 20. APPROPRIATIONS

This section authorizes Congress to appropriate the sums necessary and appropriate to carry out the provisions of the act. The funds, records, and obligations of the Manhattan engineer district are transferred to the Commission. These funds will be the only funds immediately available to the Commission.

In the original bill (H. R. 4280) there was a provision stating that the General Accounting Office was not to disallow any expenditure under the act which the Commission certified was necessary to carry out the provisions of the act. The committee considered this provision too broad in scope and omitted such provision from the bill herewith reported.

SECTION 21. SEPARABILITY OF PROVISIONS

This is the usual separability clause.

SECTION 22. SHORT TITLE

This section provides that the act may be cited as the "Atomic Energy Act of 1945."

DISSENTING VIEWS OF MEMBERS OF THE MILITARY AFFAIRS COMMITTEE ON H. R. 4566

In our opinion, H. R. 4566 should be amended as follows:

1. The Commission should be composed of full-time, well-paid members.

2. Members of the Commission should be removable by the President whenever he deems it in the national interest.

3. The Administrator should be appointed by the President and serve at his pleasure.

4. The Administrator should be a civilian.

5. The Government should be the exclusive producer and owner of plutonium and such other fissionable materials as may be defined from time to time in regulations issued by the Commission.

The Commission appointed under this bill is given plenary control of the research, development, and utilization of atomic energy in the United States. To this end the Commission is given sweeping powers never before given in peacetime to any Commission.

The field of atomic energy according to all scientific testimony given is destined to have the greatest effect on both the domestic economy and military technique. Eminent scientists have testified that it is the most significant discovery since the discovery of fire.

While the breadth of powers granted may be necessary to meet a challenge of such great stature, it is wholly inconsistent with the scope of the responsibility that members of the Commission should be, as provided in the bill, on a part-time per diem basis. Devotion of only part time to the problems facing the Commission gives not only inadequate attention to these problems, but will also permit the possible maintenance of private interests by members of the Commission which may either conflict with or be divergent from the Commission's responsibilities. Furthermore the bill does not require the Commission to meet any more frequently than four times a year; by giving the Administrator almost as broad powers as the Commission, the infrequency of these meetings is further assured. Surely the Nation deserves to have the full-time services of high-caliber well-paid men to direct the development and application of this great power which will affect the destiny of every man, woman, and child in the United States, and possibly the world.

But this is not all. Members of the Commission once appointed are to a large extent free from responsibility to any President. The President's authority to remove members of the Commission is limited to certain specified causes which constitute a demonstrated dereliction of duty. Thus, although it may be desirable to replace a member of the Commission, either to attain the services of a highly desirable individual or to promote harmony within the Commission, this step cannot be taken without at the same time damaging the reputation of the man desired to be removed. This inability to

remove commissioned members becomes even more serious when it is realized that terms of appointment are so staggered in the bill that in most cases the President would have to be elected for two successive terms before he would be in a position to appoint a majority of the Commission.

Here again, despite the breadth of powers granted the Commission, we find the Commission possessing an independence of the Chief Executive unmatched by any other executive department or agency. The bill should be amended to permit the removal of any member of the Commission whenever the President deems such action in the national interest, so as to insure that members of the Commission maintain a continuing responsibility to the President, to the Congress, and to the people, a responsibility which in this field is more important than that of any other part of the executive branch of the Government.

The pattern of independence spelled out in the bill is not yet complete. Not only is this all-powerful Commission to be on a part-time "catch as catch can" basis; not only is the Commission substantially independent of the President; but the principal full-time executive who will in fact, under this bill, direct the Nation's activities in the field of atomic energy, the Administrator is appointed by this very Commission without participation of either the President or the Congress. At a time when literally hundreds of Government executives hold positions of much less concern to the American public must be appointed by the President with congressional approval, it is inconceivable that the man whose authority is as broad as that of the Commission and who alone will devote full time to this most important development in our lifetime should be permitted to be appointed independent of the President, independent of the Congress, and by a group which itself is not required to meet standards on a par with the scope of their responsibilities. The bill should be amended to provide that the Administrator shall be appointed by the President with the consent of the Senate, and shall be removable at the pleasure of the President.

The provisions of the bill relating to people who are carrying perhaps the greatest responsibility of our times are of vital significance to every citizen of the United States. One more provision relating to personnel warrants equal concern. The American public first learned of the possibilities of atomic energy in shape of the atomic bomb. They are grateful for its effect in shortening the terrible period of destruction which has just ended. They are properly concerned over the future uses of atomic bombs and other military developments involving the release of atomic energy, but to consider the field of atomic energy as one of primarily military significance is to overlook totally the tremendous possibilities which it offers for improving the public welfare, increasing the standard of living, and generally easing the daily burdens of each of us. Scientists have testified that the harnessing of atomic energy for civilian purposes can produce a degree of human comfort the like of which the world has never seen or even imagined. While such developments are probably still some time off, some should be available in a few years and many others at a steadily increasing rate. In our opinion, the constructive possibilities of the use of atomic energy in our civilian life far exceeds the importance of atomic energy for military purposes. For these reasons, we believe the bill should

be amended specifically to require that the Administrator of the Atomic Energy Commission be a civilian.

In addition to these provisions relating to the administration of our control over the development and use of atomic energy, there is one more major field in which we believe provisions of the bill to be seriously deficient.

The bill presently provides that the Commission is authorized to acquire materials from which atomic energy is derived and to license the production of such materials whenever it deems such action necessary. The bill furnishes no policy criteria by which the Commission can be guided in making these decisions. In the light of potential importance of atomic energy to our everyday activities and in view of the tremendous military potential of these materials, it would seem reasonable to consider these materials of greater value than money. While many Government functions of great importance are subcontracted to private firms, this country has not seen fit to permit any private firm to manufacture United States currency. In our opinion, the bill should be amended to require similar protection for the source materials from which atomic energy is derived. Specifically the Commission should be the exclusive producer and owner of plutonium and other fissionable materials and should be specifically prohibited from licensing any private concern to produce, refine, or process such materials except on a research basis.

CHET HOLIFIELD.
MELVIN PRICE.



ATOMIC ENERGY ACT OF 1945

NOVEMBER 10, 1945.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. ELSTON, from the Committee on Military Affairs, submitted the following

ADDITIONAL MINORITY VIEWS

[To accompany H. R. 4566]

While we concur with the majority committee report that the future development and exploitation of atomic energy should be strictly controlled in the interest of national security, we very definitely feel that legislation on the subject should be of an interim character. Permanent legislation can and should await the settlement of international questions and the making of international agreements.

The bill before us would create the very opposite of temporary law. There is, for example, no termination date, nor is there an effort to create short terms of office. Provision for a commission of nine, with staggering 9-year terms, all too clearly implies an intention to set up a permanent agency. Moreover, there is no suggestion of congressional supervision or review. Aside from the fact that Congress is to make necessary appropriations and is permitted to receive an annual report of the Commission (which right Congress already possesses), Congress is ignored. Efforts to establish a joint congressional committee to supervise the activities of the Commission were vigorously opposed by proponents of the legislation, as were our efforts to require the concurrence of Congress before the Commission could license the secrets and use of atomic energy to foreign countries.

Even if this were to be interim legislation its extreme terms are unwarranted by any circumstance or condition, if perchance it meets at all with constitutional requirements. While the vast powers outlined in H. R. 4566 are requested under the hue and cry of an emergency, it should be borne in mind that the atomic bomb was conceived and developed over a considerable period of time without specific congressional action. We fully recognize that there must be a measure of secrecy and regulation, with rigid controls, but we are far from convinced that any emergency would warrant the surrender by Congress of the arbitrary and limitless powers sought by this

bill. Though we are in the dawn of the atomic age, there is no place in our democratic society for a measure of this kind.

The purpose of the bill is not merely to promote national defense and protect the safety of inhabitants of the United States. The Commission and the Administrator will have supervision and control over all sources of atomic power and over all matters connected with research into and the development and release of atomic energy. As atomic force may in time be adapted to every conceivable industrial use, it follows that the agency created by this measure will have power and control over private industry to an extent never before even suggested in the history of this Nation. The bill would confer on a Government bureau dictatorial authority beyond anything ever attempted in war or in peacetime. Under the pending bill atomic power for all purposes would be completely nationalized. Even on discussion a gag could be applied. While the bill apparently permits research, so long as it does not involve a national hazard, the Commission itself is empowered to designate what shall constitute such hazard. The concession therefore is meaningless. In the field of research, as well as in all other fields, science and industry alike would be harnessed to bureaucracy, under the complete domination of the Commission.

Among other things the Commission is authorized to make and modify contracts, upon such terms and conditions and in such manner as may be deemed necessary to facilitate the purposes of the act, "without regard to the provisions of law relating to the making, performance, amendment, or modification of contracts." It may make such rules and regulations as it sees fit, being required to publish them in the Federal Register only "where deemed by the Commission to be of general application and where not inconsistent with considerations of national defense or military security." The Commission may exercise the rights of eminent domain and requisition and may create or organize corporations. The Administrator (who serves at the pleasure of the Commission and whose appointment is not subject to confirmation by the Senate) has many powers in his own right and may perform most of the duties of the Commission when delegated to him. He may redelegate many of his delegated duties.

At the outset there would be transferred to the Commission all property now owned by the United States or any of its agencies used or useful in the production of atomic energy. This would include properties which have thus far cost the Government more than \$2,000,000,000.

Section 7 requires all persons knowing or having reason to believe that they have any right, title, interest, or claim in or to property of virtually every type and description, which the Commission has determined is related to the transmutation of atomic species, the production of nuclear fission, or the release of atomic energy, to declare the same to the Commission at such times, in such form and manner, and to such extent as the Commission or the Administrator may prescribe. The same section then gives the Commission the right to acquire or purchase within the United States or elsewhere, and to take, requisition, or condemn within the United States any of such property so declared. In a word, anything pertaining to atomic energy is theirs to rule. Such property would specifically include ores, metals, minerals, and other substances, as well as real

property, plants, mines, facilities and equipment, patents, contracts, agreements, leases, and rights. Generally it would embrace private property and property rights of every kind whatsoever which, in the judgment of the Commission alone, may be needed. Owners of private property would be compensated, of course, but the question of the necessity for resorting to arbitrary seizure is solely for the determination of the Commission. Under this section entire plants, including the largest in the Nation, might be requisitioned. In this connection we shall no doubt be met with the all too familiar contention (as we were in committee hearings) that while this is true, the Commission and the Administrator can be depended upon to remain within the bounds of reason.

The Commission may aid colleges, universities, scientific laboratories, hospitals, and other governmental nonprofit, or private institutions, to conduct research and experimentation. The selection of such institutions and the extent of the aid would be entirely within the discretion of the Commission. Not even the armed forces (except for military purposes in time of war or national emergency and at the direction of the President) may conduct experiments involving atomic energy without the consent of the Commission. Civil-service laws may be ignored in the employment of personnel.

The Administrator is authorized to license any or all of the property available to the Commission, without regard to the provisions of Surplus Property Acts or of any other statute, to any person, including a foreign government. A license for research and experimentation, development, and use of atomic energy to a foreign government or any person who is not under and within the jurisdiction of the United States, would require the approval of the President. In other words, the Commission may license the secrets of the atomic bomb itself to a foreign government so long as the President approves. As action of this kind may involve the security of the Nation, we submit, the concurrence of Congress should also be required. Under its licensing powers alone the Commission is given life or death control over the industry of the Nation. This statement may appear to be extreme, and it will be claimed that no such arbitrary use of power is contemplated. Nevertheless, it is possible.

The Commission is not only authorized to adopt security regulations but any rule, regulation, or consent deemed by the Commission to be essential in the performance of its duties. Severe penalties are provided for their violation. A willful violation or any willful attempt to violate, or a conspiracy to violate, any of the terms or conditions of any license, or consent of the Commission authorized by this act shall be punishable by a fine of not more than \$100,000 or by imprisonment for a term not exceeding 10 years, or both. Violations, regardless of intent, involve less severe penalties. Thus every American citizen is charged with knowledge of all regulations of the Commission published in the Federal Register. Moreover, as the Commission has the sole power to determine which of its own regulations shall be of general application, persons may be guilty of violating regulations not even appearing in the Federal Register.

Section 18 of the act provides that on application by the Commission or the Administrator, any court of competent jurisdiction is not only authorized to, but "shall, grant injunctive or other appropriate affirmative relief against any violation of any of the pro-

visions of this act, or of any rule, regulation, license, or consent authorized hereunder." We seriously question the authority of Congress to make it mandatory for the courts to grant injunctive relief against the violation of any governmental agency's rules or edicts.

In addition to other penalties, this act goes so far as to provide that the Commission or the Administrator may order a private contractor or other licensee of the Commission to discharge any person in his employment. In the exercise of this power the Commission could likewise prevent the rehiring of such person. From an order of this kind no opportunity for redress by way of appeal to the courts is provided for. In fact, no act of the Commission or of the Administrator is subject to court review. Efforts to provide for this safeguard were strongly opposed by proponents of the bill.

It will be noted that section 3 contains a provision that "the activities of the Commission shall be carried on in accordance with the basic principles established by the United States in the promotion of international peace, the development of foreign policy, and the safeguarding of the national defense." While it is contended that the purpose of this act is to regulate the development and use of atomic energy within the United States, this provision of the act would obviously require the Commission to act in accordance with the President's foreign policy. This but further emphasizes the necessity of congressional control if the secrets of atomic energy are to remain the property of this Nation, and are not to become the subject of barter and trade in accordance with present or future foreign policy as it may be decided upon by the President or the State Department.

We believe that the passage of this bill would undermine the very foundations upon which our national life is built. In its present form it would defeat the purpose for which it purports to have been introduced. Scientific research, instead of being encouraged, would be circumscribed and limited by the whim and caprice of the Commission and its personnel. What scientist or business enterprise would run the risk involved in independent research and experiment? Certainly something more should be sought than to keep from others the knowledge we have. Dictatorial control and too much regulation would in our opinion tend to stifle the kind of research and development which has made America lead the world in science, and which enabled us to create superior weapons and out produce the rest of the world during the war just ended. Other nations will be quick to take advantage of the strangulation of American ingenuity by overregulation and dictatorial control. Adequate freedom for nongovernmental research should be assured.

THE BILL IS OF DOUBTFUL CONSTITUTIONALITY

"Extraordinary conditions * * * may call for extraordinary remedies but they cannot create or enlarge constitutional power" (*Schechter v. U. S.*, 295 U. S. 495).

On this question much depends upon the extent to which Congress has delegated its legislative power. These delegations are found in various sections of H. R. 4566. The power of the Commission to legislate is conferred by section 5 wherein this broad language appears:

In the performance of its functions, the Commission is authorized— * * *
(3) from time to time, to adopt and amend such rules and regulations as may be

necessary to carry out the provisions of this act, which shall be published in the Federal Register where deemed by the Commission to be of general application and where not inconsistent with considerations of national defense or military security.

In section 3 the Commission is given "plenary supervision and control over all matters committed to the jurisdiction of the Commission (including the Administrator) by this act." The limitations upon the Commission's authority as fixed in this section are interesting. For example, free research in the field of nuclear energy is permitted where the release of atomic energy involved in such research is "not deemed by the Commission to be of military or industrial value or to constitute a national hazard." The Commission's decision in the matter is final. Moreover, the activities of the Commission "shall be carried on in accordance with the basic principles established by the United States in the promotion of international peace, the development of foreign policy, and the safeguarding of the national defense."

More specific powers are enumerated in section 5 (in addition to the power to legislate), such as the power to make contracts, bring suits, acquire property, exercise the right of eminent domain, requisition property, organize corporations, etc., and, finally (9)—

to take all such other action and exercise all such other powers as may be necessary or appropriate for the exercise of the powers and performance of the functions provided in this act.

Even broader powers are conferred under section 7, where persons are required to declare to the Commission "in such form and manner, and to such extent as the Commission or the Administrator may prescribe" any right, title, interest or claim in or to any property "which the Commission has determined is peculiarly related to the transmutation of atomic species, the production of nuclear fission, or the release of atomic energy." Also under section 11, which pertains to the licensing of the Commission's property, and section 13, providing for consent on the part of the Commission before any person can process, manufacture, or utilize any substances capable of producing atomic energy in "any appreciable quantity, as defined by regulations of the Commission."

We refer to the foregoing sections to point out that nowhere does Congress prescribe the limitations within which the Commission may legislate, except in the very general terms outlined above. Nowhere in the bill does Congress lay down the policies or establish the circumstances prerequisite to the delegation of legislative functions by Congress.

In view of the very general terms employed in the bill it can scarcely be said that the limitations prescribed in section 3 are sufficient, particularly since the Commission, and not Congress, is left to determine what shall constitute "minimum interference" with "private research and industrial activities." Except as to treaties, the limitation with respect to the Commission carrying on activities "in accordance with the basic principles of the United States in the promotion of international peace, the development of foreign policy and the safeguarding of the United States" is, as the words of the bill imply, not a limitation fixed by Congress.

While we do not desire to enter at length upon a discussion of the constitutionality of the proposed bill, we are constrained to call attention to the case of *Schechter v. U. S.*, referred to above, wherein the Supreme Court of the United States said:

Congress may leave to selected instrumentalities the making of subordinate rules within prescribed limits, and the determination of facts to which the policy, as declared by Congress, is to apply; but it must lay down the policies and establish standards.

It will be recalled that it was the *Schechter* case which held the National Industrial Recovery Act to be unconstitutional. Under that act Congress, instead of prescribing rules of conduct, authorized the making of codes for that purpose. Said the Court in that case (pp. 541 and 542):

For that legislative undertaking, § (3) sets up no standards, aside from the statement of the general aims of rehabilitation, correction, and expansion described in section one. In view of the scope of that broad declaration, and of the nature of the few restrictions that are imposed, the discretion of the President in approving or prescribing codes, and thus enacting laws for the government of trade and industry throughout the country, is virtually unfettered. We think that the code-making authority thus conferred is an unconstitutional delegation of legislative power.

Should H. R. 4566 pass in its present form, Congress will have set up no standard aside from a statement of "general aims."

In view of the language of the Court in the *Schechter* case it cannot be claimed that the Commission sought to be created by H. R. 4280 may be compared to the Interstate Commerce Commission or that the authority of the two agencies is similar. In answer to the contention that the Interstate Commerce Act determined the constitutionality of the National Industrial Recovery Act, the Supreme Court in the *Schechter* case used this pertinent language (pp. 539 and 540):

By the Interstate Commerce Act, Congress has itself provided a code of laws regulating the activities of the common carriers subject to the act, in order to assure the performance of their services upon just and reasonable terms, with adequate facilities and without unjust discrimination. Congress from time to time has elaborated its requirements, as needs have been disclosed. To facilitate the application of the standards, prescribed by the act, Congress has provided an expert body. That administrative agency, in dealing with particular cases, is required to act upon notice and hearing, and its orders must be supported by findings of fact which in turn are sustained by evidence. *Interstate Commerce Comm'n v. Louisville & Nashville R. Co.*, 227 U. S. 88; *Florida v. United States*, 282 U. S. 194; *United States v. Baltimore & Ohio R. Co.*, 293 U. S. 454. When the Commission is authorized to issue, for the construction, extension, or abandonment of lines, a certificate of "public convenience and necessity," or to permit the acquisition by one carrier of the control of another, if that is found to be "in the public interest," we have pointed out that these provisions are not left without standards to guide determination. The authority conferred has direct relation to the standards prescribed for the service of common carriers and can be exercised only upon findings, based upon evidence, with respect to particular conditions of transportation. *New York Central Securities Co. v. United States*, 287 U. S. 12, 24, 25; *Texas & Pacific Railway Co. v. Gulf, Colorado & Santa Fe Ry. Co.* 270 U. S. 266, 273; *Chesapeake & Ohio Ry. Co. v. United States*, 283 U. S. 35, 42.

In the light of the foregoing we favor the recommittal of this bill for further consideration.

DEWEY SHORT.
L. C. ARENDS.
CHARLES R. CLASON.
JOHN E. SHERIDAN.
PAUL W. SHAFER.
CHARLES H. ELSTON.
FOREST A. HARNESS.
IVOR D. FENTON.
CLARE BOOTHE LUCE.

Union Calendar No. 365

79TH CONGRESS
1ST SESSION

H. R. 4566

[Report No. 1186]

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 1, 1945

Mr. MAY introduced the following bill; which was referred to the Committee on Military Affairs

NOVEMBER 5, 1945

Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

A BILL

For the development and control of atomic energy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 FINDINGS AND DECLARATION OF POLICY

4 SECTION 1. Research and experimentation in the field
5 of nuclear fission has attained the stage at which the release
6 of atomic energy on a large scale is practical. The proper
7 development and utilization of such energy will advance the
8 national welfare, secure the national defense, insure the na-
9 tional safety, and promote world peace, to an extent and
10 by means which cannot now be measured. The misuse of
11 such energy, by design or through ignorance, may inflict

1 incalculable disaster upon the Nation, destroy the general
2 welfare, imperil the national safety, and endanger world
3 peace. In the highest national interest, and to protect the
4 national existence, it is essential to develop fully the new
5 strength and to promote the enrichment of the national life
6 that can come from knowledge and practical use of this newly
7 tapped source of energy. Accordingly, it is hereby declared
8 to be the policy of the United States, (A) to encourage free
9 research in the field of nuclear energy, and in other scientific
10 fields employing the results or methods of research in that
11 field, and to further the practical application of such research;
12 and (B) in the interest of the Nation and world peace, to
13 control the substantial sources of atomic energy, and such
14 activities concerned with the release and utilization of atomic
15 energy as are on a scale which would constitute a national
16 hazard, or which would be of military or industrial value.
17 The primary objectives of all action taken under this Act
18 to fulfill the foregoing policy shall be the promotion of the
19 national defense, the protection of the safety of the inhabi-
20 tants of the United States, the promotion of world peace,
21 the enrichment of the national life, the promotion of the gen-
22 eral welfare, and the furtherance of the acquisition of knowl-
23 edge concerning atomic energy.

24 THE ATOMIC ENERGY COMMISSION; ADMINISTRATOR

25 SEC. 2. (a) There is hereby established the Atomic

1 Energy Commission (hereinafter called the "Commission")
2 which shall be composed of nine members, who shall be
3 appointed by the President, by and with the advice and
4 consent of the Senate. The President shall initially appoint
5 three members to serve for three years, three for six years,
6 and three for nine years; and thereafter each member ap-
7 pointed shall serve for a term of nine years, except that a
8 member appointed to fill a vacancy occurring prior to the
9 expiration of the term for which his predecessor was ap-
10 pointed shall be appointed for the remainder of such term.
11 The President shall designate one of the members of the
12 Commission as Chairman. Six of the members shall con-
13 stitute a quorum of the Commission. Members of the Com-
14 mission may be removed by the President only for inability
15 to act, neglect of duty, malfeasance in office, conflict of
16 interests, or because continuance of the member in office
17 would be inimical to the national interest. The members
18 of the Commission, except officers of the armed forces on
19 active duty and civilian members holding other offices or
20 positions under the United States, shall receive a per diem
21 allowance of \$50 for each day spent in meetings or con-
22 ferences of the Commission and all members shall receive
23 compensation for necessary traveling or other expenses
24 incurred while engaged in the work of the Commission.
25 The provisions of sections 109 and 113 of the Criminal

1 Code (U. S. C., 1940 edition, title 18, secs. 198 and 203)
2 shall not be deemed to apply to any person because of
3 membership on the Commission, and members may engage
4 in other occupations or businesses, private or governmental,
5 to an extent not inconsistent with the performance of their
6 duties, and may hold other offices or positions under the
7 United States and receive compensation therefor.

8 (b) The Commission shall meet at least four times in
9 every calendar year.

10 (c) The Commission shall, without regard to the civil-
11 service laws, appoint an Administrator and a Deputy Ad-
12 ministrator who shall not be members of the Commission
13 and shall serve at its pleasure. The Administrator and the
14 Deputy Administrator shall engage in no other occupation
15 or business, and shall receive compensation at the rate of
16 \$15,000 and \$12,000 per year, respectively, in addition
17 to which each shall be reimbursed for necessary traveling
18 expenses.

19 (d) Notwithstanding the provisions of law codified in
20 the United States Code, 1940 edition, title 10, section 576,
21 or title 5, sections 59 (a) and 62, or any other statute, any
22 active or retired officer of the armed forces, the Coast and
23 Geodetic Survey, and the Public Health Service, may serve
24 as a member of the Commission, as Administrator, or as
25 Deputy Administrator, without prejudice to his commis-

1 sioned status as such officer; no retired officer shall be deemed
2 to have been placed on active status by reason of such
3 service; any officer serving as Administrator or as Deputy
4 Administrator shall receive, in addition to his pay from
5 the United States as such officer, an amount equal to the
6 difference between such pay and the compensation pre-
7 scribed in subsection (c).

8 (e) The Commission and the Administrator, within
9 the limits of funds which may be made available, may
10 each employ and fix the compensation of necessary per-
11 sonnel without regard to the provisions of the civil-service
12 laws, the Classification Act of 1923, or any other statute,
13 and may each make such expenditures for supplies, prop-
14 erty, facilities, and services as may be necessary to carry
15 out their respective functions.

16 GENERAL AUTHORITY OF THE COMMISSION AND THE
17 ADMINISTRATOR

18 SEC. 3. (a) The Commission shall have plenary super-
19 vision and control over all matters committed to the juris-
20 diction of the Commission (including the Administrator) by
21 this Act. In the performance of its functions, the Commis-
22 sion shall adopt the policy of (1) full encouragement of free
23 research in the field of nuclear energy, and in other fields
24 employing the results or methods of research in that field,
25 together with the furtherance of the practical application of

1 such research; (2) noninterference with the conducting and
2 disclosure by private persons of research in the field of
3 nuclear energy, or in other fields employing the results or
4 methods of research in that field, where the release of actual
5 amounts of atomic energy involved in such research are not
6 deemed by the Commission to be of military or industrial
7 value or to constitute a national hazard; (3) minimum inter-
8 ference consistent with the accomplishment of the objectives
9 of this Act with the conducting and disclosure of other private
10 research and industrial activities; and (4) employing other
11 Government agencies, educational and research institutions,
12 and private enterprise to the maximum extent consistent
13 with the accomplishment of the objectives of this Act. The
14 activities of the Commission shall be carried on in a manner
15 consistent with the foreign policy and the national defense
16 policy of the United States, as such policies may from time
17 to time be communicated to the Commission by the President.

18 (b) Subject to the direction and supervision of the
19 Commission, the Administrator shall be charged with and
20 responsible for the administration of this Act, and any power,
21 function, duty, authority, or discretion conferred on the
22 Administrator by or pursuant to any provision of this Act
23 shall be exercised or performed under, or subject to, the
24 direction and supervision of the Commission. The Deputy
25 Administrator shall have such authority and exercise such

1 powers as may be delegated to him by the Administrator
2 and, in the absence of the Administrator, or in the event of
3 his inability to act, shall act as Administrator. With this
4 in view, the Deputy Administrator shall at all times be kept
5 fully informed by the Administrator.

6 (c) All Government agencies are directed to render full
7 cooperation, aid, and assistance to the Commission and the
8 Administrator, to effectuate any applicable regulations, orders,
9 and directives of the Commission and the Administrator.
10 With the consent of such agencies, or with the approval of
11 the President, the Commission and the Administrator may
12 themselves utilize and direct the services of officers or em-
13 ployees of other Government agencies.

14 ADVISORY BOARDS

15 SEC. 4. (a) The President may from time to time estab-
16 lish such advisory boards as he deems appropriate to assist
17 in the effectuation of the purposes of this Act, and shall pre-
18 scribe the composition, functions, duties, and duration of such
19 advisory boards. One member of each board shall be desig-
20 nated by the President as chairman thereof.

21 (b) Members of the boards, except officers of the armed
22 forces on active duty and civilian members holding other
23 offices or positions under the United States, shall receive a
24 per diem allowance of \$25 for each day spent in actual meet-
25 ings or conferences, and all members shall receive necessary

1 traveling and other expenses while so engaged. The provi-
2 sions of sections 109 and 113 of the Criminal Code (U. S. C.,
3 1940 edition, title 18, secs. 198 and 203) shall not be
4 deemed to apply to any person because of membership on
5 said boards, and members may engage in other occupations
6 or businesses, private or governmental, to an extent not
7 inconsistent with the performance of their duties, and may
8 hold other offices or positions under the United States and
9 receive compensation therefor. Any active or retired officer
10 of the armed forces, the Coast and Geodetic Survey, and
11 the Public Health Service may serve as a member of an
12 advisory board without prejudice to his commissioned status
13 as such officer, notwithstanding the provisions of law codified
14 in the United States Code, 1940 edition, title 10, section
15 576, or title 5, section 59 (a) or 62, or any other statute;
16 no retired officer shall be deemed to have been placed on
17 active status by reason of service on an advisory board.

18 (c) The Commission and the Administrator shall ad-
19 vise and consult with such advisory boards as may have
20 been established, on matters within their respective spheres
21 of interest, and the boards may make such recommendations
22 to the Commission or the Administrator relating to legisla-
23 tion, policies, procedures, administration, and research as
24 they may deem desirable in the performance of their
25 functions,

1 GENERAL POWERS OF THE COMMISSION AND OF THE
2 ADMINISTRATOR; DELEGATION OF AUTHORITY

3 SEC. 5. (a) In the performance of its functions, the
4 Commission is authorized—

5 (1) to make and modify agreements, arrange-
6 ments, and contracts (including where deemed advis-
7 able cost-plus-fixed-fee contracts but not cost-plus-a-
8 percentage-of-cost contracts), upon such terms and con-
9 ditions and in such manner as may be deemed necessary
10 to facilitate the purposes of this Act, without regard to
11 the provisions of law relating to the making, perform-
12 ance, amendment, or modification of contracts;

13 (2) to make advance, partial, and other payments
14 in connection with contracts;

15 (3) from time to time, to adopt and amend such
16 rules and regulations as may be necessary to carry out
17 the provisions of this Act, which shall be published in
18 the Federal Register where deemed by the Commission
19 to be of general application and where not inconsistent
20 with considerations of national defense or military
21 security;

22 (4) to bring suit in its own name, or in the name
23 of the United States, in any court, State or Federal,
24 of competent jurisdiction;

1 (5) to acquire, purchase, lease, and hold real and
2 personal property as agent of and on behalf of the
3 United States, and to sell, lease, grant, and dispose of
4 such real and personal property as provided in this Act;

5 (6) to exercise, in the name and on behalf of the
6 United States, the rights of eminent domain and requi-
7 sition as provided in this Act;

8 (7) to create or organize corporations, the stock
9 of which shall be wholly owned by the United States
10 and controlled by the Commission, to carry out the
11 provisions of this Act;

12 (8) to exercise the duties and authorities of the
13 head of a department of the Government respecting
14 the making of a certificate in the manner and for the
15 purpose provided in section 4894 of the Revised Stat-
16 utes as amended (U. S. C., 1940 edition, title 35,
17 sec. 37) ;

18 (9) to take all such other action and exercise all
19 such other powers as may be necessary or appropriate
20 for the exercise of the powers and performance of the
21 functions provided in this Act.

22 (b) In the performance of his functions, and subject
23 to the supervision and direction of the Commission, the Ad-
24 ministrator shall also have the powers and authority pro-

1 vided in subsections (a) (1), (2), (4), (5), (6), (8),
2 and (9) hereof.

3 (c) The Administrator may delegate any power and
4 authority conferred upon him by or pursuant to this Act,
5 except that provided in subsections (a) (4), (6), and (8)
6 herèof and that provided in section 11, to any qualified
7 officer, or employee of the Commission, the Adminis-
8 trator, or any other Government agency, and may authorize
9 successive redelegations of such power and authority to such
10 personnel: *Provided*, That any delegation by the Admin-
11 istrator of power and authority to purchase, acquire, or sell
12 real property shall be specific in terms. Nothing in this
13 subsection (c) shall restrict the Administrator's powers of
14 delegation to the Deputy Administrator as provided in
15 section 3 (b).

16 TRANSFER OF CERTAIN GOVERNMENT PROPERTY, AND OF
17 CERTAIN RIGHTS IN OTHER GOVERNMENT PROPERTY,
18 TO THE COMMISSION

19 SEC. 6. (a) There are hereby transferred into the cus-
20 tody and control of the Commission the following property
21 owned by the United States or any of its agencies, or any
22 interest in such property held in trust for or on behalf of
23 the United States:

24 (1) All stocks of the ores or other materials from

1 which the substances known as thorium, uranium (in-
2 cluding uranium enriched as to one of its isotopes), and
3 elements higher than uranium in the periodic table, can
4 be refined or produced;

5 (2) All plants, facilities, equipment, and materials
6 for the refining, or production, or for the utilization, in
7 any form, of the substances described in subsection
8 (a) (1) ;

9 (3) All stocks, on hand or in process, of the sub-
10 stances described in subsection (a) (1) ;

11 (4) All processes and technical information of any
12 kind, and the sources thereof (including data, drawings,
13 specifications, patents, patent applications, and other
14 sources), relating to the refining, production, or utiliza-
15 tion of the substances described in subsection (a) (1) ;

16 (5) All contracts, agreements, leases, patents,
17 applications for patents, inventions and discoveries
18 (whether patented or unpatented), and other rights of
19 any kind concerning any items of the types of property
20 described in subsections (a) (1) to (a) (4) ;

21 (6) All property in the custody and control of the
22 Manhattan Engineer District, Army Service Forces,
23 Army of the United States.

24 (b) (1) The Commission, and the Administrator, their
25 agents, and persons licensed for that purpose under section

1 11, shall hereafter have the exclusive right, with respect to
2 Government-owned deposits and land (public and acquired),
3 (A) to prospect and explore for, and to mine and remove
4 deposits from which there can be refined or produced appre-
5 ciable quantities (as defined from time to time by regulations
6 of the Commission) of substances described in subsection (a)
7 (1), or of substances to which the application of this para-
8 graph is extended pursuant to paragraph (2) of this subsec-
9 tion, and no person may hereafter acquire any such right
10 under any other law; and (B) to protect, preserve, and
11 guard any such deposits whenever the right so to do is re-
12 quested by the Commission or the Administrator. The Com-
13 mission or the Administrator shall give reasonable advance
14 notice to the head of the Government agency having juris-
15 diction over the land or deposits of the intention to exer-
16 cise any of the foregoing rights. All Government-owned
17 deposits and lands (public and acquired) shall, except as
18 herein provided, continue to be administered and disposed
19 of under the laws applicable thereto, but hereafter all patents,
20 conveyances, grants, leases, and other transfers of any right,
21 title, or interest in or to any such deposits or lands shall
22 reserve to the United States, for its benefit and the benefit
23 of its agents, assigns, and persons licensed for that purpose
24 under section 11, the exclusive right to prospect and explore
25 for, and to mine and remove deposits from which there can

1 be refined or produced appreciable quantities (as defined
2 from time to time by regulations of the Commission) of
3 substances described in subsection (a) (1) and of sub-
4 stances to which, at the time of the transfer, the application
5 of this paragraph has been extended pursuant to paragraph
6 (2).

7 (2) Whenever the Commission determines that any sub-
8 stance in addition to those described in subsection (a) (1)
9 is readily capable of or peculiarly related to transmutation
10 of atomic species, production of nuclear fission, or release of
11 atomic energy, it is authorized to extend the application of
12 paragraph (1) to such substance. Notice of such extension
13 shall be published in the Federal Register.

14 (3) Any person who suffers damage or injury to any
15 right, title, or interest which he has in or to any property,
16 occasioned by the exercise of any right granted or reserved
17 under paragraph (1), shall be entitled to receive compensa-
18 tion for such damage or injury, but such compensation shall
19 not include any payments on account of the deposits in ques-
20 tion. The Administrator is authorized to settle and pay
21 claims for such compensation.

22 (c) The President is authorized to provide, upon such
23 terms and conditions as he may prescribe (including terms
24 and conditions for reimbursement or nonreimbursement),
25 for the transfer to the control, possession, and use of the

1 Commission of such other property of the United States as
2 he may from time to time deem necessary and proper for
3 the purposes of the Commission.

4 POWER OF COMMISSION TO REQUIRE DECLARATIONS OF
5 CERTAIN PROPERTY, AND TO ACQUIRE, REQUISITION,
6 AND CONDEMN CERTAIN PROPERTY

7 SEC. 7. (a) All persons knowing or having reason to
8 believe that they have any right, title, interest, or claim in
9 or to any property of the following types, which the Commis-
10 sion has determined is peculiarly related to the transmutation
11 of atomic species, the production of nuclear fission, or the
12 release of atomic energy:

13 (1) ores, metals, minerals, and other substances or
14 materials;

15 (2) real property, plants, mines, facilities, and
16 equipment;

17 (3) technical information of all kinds;

18 (4) patents, applications for patents, inventions and
19 discoveries (whether patented or unpatented), and rights
20 thereunder; and

21 (5) contracts, agreements, leases, and rights;

22 shall at such time or times, in such form and manner, and
23 to such extent as the Commission or the Administrator may
24 prescribe, declare the same to the Commission.

25 (b) Whenever the Commission deems such action essen-

1 tial to the performance of its functions the Commission or
2 the Administrator is authorized, on behalf of and as agent of
3 the United States, to acquire or purchase, within the United
4 States or elsewhere, and to take, requisition, or condemn,
5 within the United States, as the case may be, any property
6 of a type with respect to which a declaration can be required
7 under subsection (a) of this section.

8 (c) In the performance of its functions under this Act,
9 the Commission is authorized to conduct, or to provide for
10 the conducting by the Administrator of, exploratory oper-
11 ations or investigations to determine the locations, extent, and
12 mode of occurrence of deposits of any ores, metals, minerals,
13 or substances, with or without the consent of any person hold-
14 ing any interest in the property so affected, but such persons
15 shall be entitled to receive compensation for any damage or
16 injury to their interests in such property, occasioned by the
17 exercise of the authority of the Commission or Administrator
18 under this subsection, and the Administrator may settle and
19 pay claims for such compensation.

20 COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

21 SEC. 8. (a) The United States shall make just compen-
22 sation for the personal property acquired, taken, or requis-
23 itioned pursuant to section 7. The Commission shall de-
24 termine such compensation. If the compensation so de-
25 termined be unsatisfactory to the person entitled thereto,

1 such person shall be paid 90 per centum of the amount
2 so determined, and shall be entitled to sue the United
3 States to recover such further sum as added to said 90 per
4 centum will make up such amount as will be just compen-
5 sation.

6 (b) In the exercise of the rights of eminent domain and
7 condemnation, the Commission or the Administrator shall
8 cause proceedings to be instituted under the Act of August 1,
9 1888 (U. S. C., 1940 edition, title 40, sec. 257), or any
10 other applicable Federal statute. Upon or after the filing of
11 the condemnation petition, immediate possession may be
12 taken and the property may be occupied, used, and improved
13 for the purposes of this Act, notwithstanding any other law.
14 Real property acquired by purchase, donation, or other means
15 of transfer may also be occupied, used, and improved for the
16 purposes of this Act, prior to approval of title by the Attor-
17 ney General.

18 INVENTORIES OF PROPERTY

19 SEC. 9. Within three months after the enactment of this
20 Act, the Administrator shall compile a preliminary inventory
21 of the property of the United States subject to the jurisdiction
22 of the Commission, and shall prepare a complete inventory
23 as soon thereafter as possible. Every year thereafter the
24 Administrator shall compile supplementary inventories, indi-

1 eating all changes in such property. A copy of each inven-
2 tory compiled by the Administrator shall be submitted to
3 the President, and be transmitted by the President to the
4 Congress. The President before transmitting any such copy
5 to the Congress may omit therefrom any portions the omis-
6 sion of which he deems required in the interests of national
7 defense and military security, but the fact of each such
8 omission shall be noted on the copy so transmitted. Nothing
9 in this section shall affect the power of the Congress, or of
10 either House thereof, or of any standing or select committee
11 of either House thereof, or of any joint committee of the two
12 Houses thereof, to require the furnishing to it of the infor-
13 mation so omitted.

14 ACTIVITIES OF COMMISSION

15 SEC. 10. (a) The Commission is authorized to conduct,
16 or provide for the conducting by the Administrator of,
17 research and experimentation in the field of nuclear
18 fission, the transmutation of atomic species, and closely
19 related phenomena, and to proceed with the development
20 of any and all processes or methods for the release of atomic
21 energy, and for the exploitation and use thereof for military,
22 industrial, scientific, or medical purposes: *Provided, however,*
23 That it shall be the policy of the Commission and of the
24 Administrator, in accord with the objectives of this Act, to
25 utilize, encourage, and aid colleges, universities, scientific

1 laboratories, hospitals, and other governmental, nonprofit,
2 or private institutions equipped and staffed to conduct re-
3 search and experimentation in this field. The Commission
4 may also engage, or authorize the Administrator to engage,
5 in all such related activities as may be deemed necessary for
6 the proper performance of these functions. In performing
7 any of the functions under this section, the Commission and
8 Administrator may construct, establish, and operate all neces-
9 sary plants and facilities, may modify and use any or all of
10 the property available to the Commission, and may employ
11 such personnel as may be necessary. Without regard to
12 the civil-service laws or any other statute, the Commis-
13 sion and Administrator, may also arrange by contract or
14 otherwise, with other persons to engage in any of the fore-
15 going activities on behalf of the Commission, and subject
16 to its supervision.

17 (b) No other Government agency, except the armed
18 forces for military purposes in time of war or national emer-
19 gency and at the direction of the President, shall undertake or
20 engage in such activities without the consent of the Com-
21 mission or the Administrator and upon such conditions as
22 the Commission, or the Administrator with the approval
23 of the Commission, may prescribe.

24 (c) In the administration of this Act, the Commis-

1 sion, the Administrator, and their agents and licensees shall,
2 so far as feasible, protect and conserve all natural resources.

3 LICENSING OF THE COMMISSION'S PROPERTY

4 SEC. 11. (a) The Commission is authorized to license,
5 or to provide for the licensing by the Administrator of, any
6 or all of the property available to the Commission, without
7 regard to the provisions of the Surplus Property Act of 1944
8 or of any other statute, to any person or Government agency
9 for (1) research and experimentation in nuclear fission or
10 the transmutation of atomic species; (2) the development,
11 exploitation, and use of processes or methods for the release
12 of atomic energy; (3) any use of such property where it is
13 deemed advisable for the purposes of this Act to retain con-
14 trol or supervision in the Commission over the property; its
15 utilization, or disposition; or (4) any other purpose related
16 to the purposes of this Act, except that the Commission and
17 the Administrator shall not license any complete plant or
18 facility to any private person until sixty days after a full
19 report to the Congress of the intention to grant such license,
20 and the reasons therefor, shall have been made while the
21 Congress is in session. No such license for purposes (1),
22 (2), or (3) shall be given by the Commission or the Ad-
23 ministrator to a foreign government or any person who is not
24 under and within the jurisdiction of the United States, with-
25 out the approval of the President.

1 (b) The Commission is authorized to make grants or
2 loans of funds, or to provide for the granting or lending of
3 funds by the Administrator, for research, experimentation,
4 or development in nuclear fission, the transmutation of atomic
5 species, or the release of atomic energy.

6 (c) It shall be a condition of all licenses given, and
7 grants and loans made, pursuant to this section that the
8 holder, grantee, or borrower shall file with the Commission
9 such reports concerning the use of the licensed property or
10 the grants or loans, and related matters, as the Administrator
11 or the Commission may require. The Commission may im-
12 pose, or authorize the Administrator to impose, such other
13 terms and conditions upon the licensee, grantee, or borrower
14 as may be deemed advisable and appropriate in the national
15 interest, and as are in accord with the policies set forth in
16 sections 1 and 3 (a).

17 (d) In the performance of their functions under this
18 section and section 13, the Commission and the Adminis-
19 trator shall adopt the policy of (1) widespread distribution,
20 so far as feasible, of such licenses, grants, loans, and consents
21 on equally equitable terms to all qualified persons, and (2)
22 discouraging the growth of monopoly, restraint of trade, and
23 unlawful competition in the trades and industries affected
24 by such licenses, grants, loans, and consents. The Commis-

1 sion and the Administrator shall promptly report to the At-
2 torney General any evidence which they may have (1) of
3 the use of property licensed or of grants or loans made under
4 this section or (2) of action under any consent granted under
5 section 13, which fosters monopoly, restraint of trade, or
6 unlawful competition.

7 DISPOSAL OF SURPLUS PROPERTY

8 SEC. 12. Whenever the Commission determines that
9 control over any property of the United States of which
10 the Commission has jurisdiction, or that the disposition of
11 such property under section 10 or 11, is no longer neces-
12 sary to carry out the purposes and provisions of this Act,
13 it shall report such property to the appropriate Govern-
14 ment agency concerned with the utilization and disposi-
15 tion of such property, and shall turn over or dispose of
16 such property pursuant to the orders of such agency: *Pro-*
17 *vided*, That the Commission shall itself be authorized (with-
18 out regard to the Surplus Property Act of 1944 or any
19 other statute) to sell or return any real or personal prop-
20 erty, on such terms and conditions as it deems proper, to
21 the person from whom such property was acquired, and
22 his heirs or assignees, or to the present occupants or holders
23 of such property: *And provided further*, That the Commis-
24 sion shall return any such property to the Government
25 agency from which it was acquired.

CONTROL OF PRIVATE ACTIVITIES

SEC. 13. (a) It shall be unlawful for any person without the consent of the Administrator and upon such conditions as he, with the approval of the Commission, may prescribe—

(1) to refine, produce, or process any appreciable quantity, as defined by regulations of the Commission, of the substances described in section 6 (a) (1) or any ores or materials known to be capable of producing such substances;

(2) to use, process, manufacture, or utilize, in any manner, any appreciable quantity, as defined by regulations of the Commission, of the substances described in section 6 (a) (1).

(b) It shall be unlawful for any person to export from or import into the United States ores or other materials containing any appreciable quantity, as defined by regulation of the Commission, of the substances described in section 6 (a) (1), or such substances, for any purpose, until after application has been made to the Administrator and the Administrator's consent has been obtained, including in such application a sworn statement as to the quantity, destination, consignee, and intended use of the material being exported or imported, together with such other information as the Commission may require. The Commission may pro-

1 hibit or condition the exportation or importation of the mate-
2 rials described above in such manner as it finds to be required
3 by the policies and purposes of the Act.

4 (c) The Commission is authorized to extend the provi-
5 sions of subsections (a) or (b) to any other metal or sub-
6 stance determined by the Commission to be readily capable of
7 or peculiarly related to the transmutation of atomic species,
8 the production of nuclear fission, or the release of atomic
9 energy. Notice of such extensions shall be published in the
10 Federal Register.

11 (d) (1) It shall be unlawful for any person to conduct
12 research in the field of nuclear energy, or in other fields
13 employing the results or methods of research in that field,
14 involving the release of actual amounts of atomic energy
15 which constitute a national hazard, or are of military or in-
16 dustrial value, without the consent of the Administrator, and
17 upon such conditions as the Administrator, with the approval
18 of the Commission, may prescribe.

19 (2) Nothing in this section or in section 16 (3) shall
20 prohibit, or shall subject to the jurisdiction of the Commission
21 or the Administrator, the conducting or disclosure by private
22 persons of research in the field of nuclear energy, or in other
23 fields employing the results or methods of research in that
24 field, unless the release of actual amounts of atomic energy

1 involved in such research constitutes a national hazard or is
2 of military or industrial value.

3 (c) The Administrator and the Commission shall have
4 plenary authority to direct, supervise, regulate, and inspect
5 the activities with respect to which consent has been granted,
6 to the extent necessary to enforce compliance with the con-
7 ditions which have been prescribed in connection with the
8 granting of consent to such activities.

9 REPORTS

10 SEC. 14. As soon as practicable after the close of each
11 fiscal year, the Commission shall submit to the President (a)
12 reports concerning the matters within its jurisdiction and the
13 exercise of its authority under this Act, and (b) financial
14 statements of the Government operations and activities sub-
15 ject to its jurisdiction. The President shall transmit a copy
16 of each report and statement to the Congress. The President
17 before transmitting any such copy to the Congress may omit
18 therefrom any portions the omission of which he deems re-
19 quired in the interests of national defense and military
20 security, but the fact of each such omission shall be noted on
21 the copy so transmitted. Nothing in this section shall affect
22 the power of the Congress, or of either House thereof, or
23 of any standing or select committee of either House thereof,
24 or of any joint committee of the two House thereof, to require
25 the furnishing to it of the information so omitted.

1 VOLUNTARY PAYMENTS TO STATES AND LOCALITIES

2 SEC. 15. In order to render financial assistance to those
3 States and local governments in which the activities of the
4 Commission are carried on and in which the Commission, or
5 its agents, have acquired properties previously subject to
6 State and local taxation, the Commission is authorized to
7 make payments to States and local governments in lieu of
8 such taxes. Such payments may be in the amounts, at the
9 times, and upon the terms the Commission deems appro-
10 priate, but the Commission shall be guided by the policy of
11 not exceeding the taxes which would have been payable
12 for such property in the condition in which it was acquired,
13 except where special burdens have been cast upon the State
14 or local government by activities of the Commission, the
15 Administrator, the Manhattan Engineer District, or their
16 agents, and in such cases any benefits accruing to the States
17 and local governments by reason of these activities shall be
18 considered in the determination of such payments. The
19 Commission and any corporation created by it, and the
20 property and income of the Commission or of such corpora-
21 tions, are hereby expressly exempted from taxation in any
22 manner or form by any State, county, municipality, or any
23 subdivision thereof.

24 SECURITY REGULATIONS

25 SEC. 16. Insofar as required by the national defense

1 or by considerations of military security, the Commission
2 is authorized and directed to establish, and to provide for
3 the administration of, security regulations governing the col-
4 lection, classification, dissemination, publication, transmis-
5 sion, handling, and communication by any person of in-
6 formation, data, documents, equipment, and material of any
7 kind relating to or connected with research on the transmu-
8 tation of atomic species, with the production of nuclear fission,
9 or with the release of atomic energy, in all cases where such
10 information, data, documents, equipment, or material have
11 at any time, before or after the passage of this Act, been
12 entrusted to, or come into the knowledge or possession of,
13 any such person (1) by reason of his official duties, or (2)
14 pursuant to a contract with or license from, or in the course
15 of employment by, the Commission, the Administrator, any
16 other Government agency, their agents, contractors, or
17 licensees, or (3) in connection with activities governed by
18 section 13.

19 GENERAL PENALTIES

20 SEC. 17. (a) Any willful violation or any willful at-
21 tempt to violate, or any conspiracy to violate, any of the
22 provisions of this Act, or of the terms or conditions of any
23 license or consent authorized hereunder, except as provided
24 in section 18, shall be punishable by a fine of not more than

1 \$100,000 or by imprisonment for a term of not exceeding
2 ten years, or both.

3 (b) On application by the Commission or the Admin-
4 istrator, any court of competent jurisdiction is authorized
5 to, and shall, grant injunctive or other appropriate affirmative
6 relief against any violation of any of the provisions of this
7 Act, or of any rule, regulation, license, or consent authorized
8 hereunder.

9 PENALTIES FOR SECURITY VIOLATIONS

10 SEC. 18. (a) Any willful or grossly negligent violation
11 of any security regulation promulgated by the Commission
12 pursuant to section 16 shall, in addition to any other penal-
13 ties, be ground for dismissal from employment by the Com-
14 mission or the Administrator, or for dismissal, at the direc-
15 tion of the Administrator, from employment in connection
16 with activities governed by this Act by other Government
17 agencies, or the agents, holders of consents, or licensees of
18 the Commission, the Administrator, or other Government
19 agencies, without regard to criminal prosecution or convic-
20 tion thereunder.

21 (b) Any violation of security regulations promulgated
22 by the Commission pursuant to section 16 of this Act
23 shall be punishable by a fine of not more than \$500 or, if
24 willful or through gross negligence, shall be punishable by a
25 fine of not more than \$10,000 or by imprisonment for a

1 term not exceeding five years, or both. An attempt to
2 violate or a conspiracy to violate security regulations pro-
3 mulgated by the Commission pursuant to section 16 of this
4 Act shall be punishable in the same manner.

5 (c) Whoever, lawfully or unlawfully, having posses-
6 sion of, access to, control over, or being entrusted with any
7 information, data, documents, equipment, or material of
8 any kind relating to or connected with research on the
9 transmutation of atomic species, with the production of
10 nuclear fission, or with the release of atomic energy, with
11 the intent to jeopardize the interests of the United States,
12 or with reason to believe that his act will have such conse-
13 quences, communicates or transmits, or attempts or con-
14 spires to communicate or transmit the same to any person
15 not entitled to receive it, shall be punished by a fine of not
16 more than \$300,000 or by imprisonment for a term of
17 not exceeding thirty years, or both.

18 DEFINITIONS

19 SEC. 19. As used in this Act—

20 (a) The term “Government agency” means any execu-
21 tive department, board, bureau, commission, or other agency
22 in the executive branch of the Federal Government, or any
23 corporation wholly owned (either directly or through one or
24 more corporations) by the United States.

25 (b) The term “person” means any individual, corpora-

1 tion, partnership, firm, association, trust, estate, political
2 entity, public or private institution, group, or other entity.

3 (c) The term "material" includes any article, com-
4 modity, substance, machinery, accessory, equipment, part,
5 component, assembly, work in process, maintenance, repair
6 and operating supplies, and any product of any kind.

7 (d) The term "United States" includes all Territories
8 and possessions of the United States.

9 (e) The term "license" includes license, lease, loan,
10 sell, furnish, make available, dispose, grant any right or
11 interest.

12 (f) The term "property" includes real property (in-
13 cluding all interests in or pertaining thereto), personal prop-
14 erty, intangible property, plants, equipment, and materials.

15 (g) The term "agent" of the Commission or of the
16 Administrator includes corporations created by the Com-
17 mission, contractors with the Commission or the Adminis-
18 trator, and other agents.

19 APPROPRIATIONS

20 SEC. 20. There are hereby authorized to be appropriated
21 such sums as may be necessary and appropriate to carry out
22 the provisions and purposes of this Act. So much of the
23 unexpended balances of appropriations, allocations, or other
24 funds available for the use of the Manhattan Engineer Dis-
25 trict, Army Service Forces, and all records and all outstand-

1 ing obligations thereof, shall be transferred to the Com-
2 mission for use in connection with the exercise of any of the
3 functions authorized by this Act.

4 SEPARABILITY OF PROVISIONS

5 SEC. 21. If any provision of this Act, or the application
6 of such provision to any person or circumstances, is held
7 invalid, the remainder of this Act or the application of such
8 provision to persons or circumstances other than those to
9 which it is held invalid, shall not be affected thereby.

10 SHORT TITLE

11 SEC. 22. This Act may be cited as the "Atomic Energy
12 Act of 1945".

79TH CONGRESS
1ST SESSION

H. R. 4566

[Report No. 1186]

A BILL

For the development and control of atomic
energy.

By Mr. May

NOVEMBER 1, 1945

Referred to the Committee on Military Affairs

NOVEMBER 5, 1945

Committed to the Committee of the Whole House on
the State of the Union and ordered to be printed

79TH CONGRESS
1ST SESSION

S. 1717

IN THE SENATE OF THE UNITED STATES

DECEMBER 20 (legislative day, DECEMBER 19), 1945

Mr. McMAHON introduced the following bill; which was read twice and referred to the Special Committee on Atomic Energy

A BILL

For the development and control of atomic energy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **DECLARATION OF POLICY**

4 **SECTION 1. (a) FINDINGS AND DECLARATION.—Re-**
5 **search and experimentation in the field of nuclear fission have**
6 **attained the stage at which the release of atomic energy on**
7 **a large scale is practical. The significance of the atomic bomb**
8 **for military purposes is evident. The effect of the use of**
9 **atomic energy for civilian purposes upon the social,**
10 **economic, and political structures of today cannot now**
11 **be determined. It is reasonable to anticipate, however,**

1 that tapping this new source of energy will cause profound
2 changes in our present way of life. Accordingly, it is
3 hereby declared to be the policy of the people of the United
4 States that the development and utilization of atomic energy
5 shall be directed toward improving the public welfare, in-
6 creasing the standard of living, strengthening free com-
7 petition among private enterprises so far as practicable, and
8 cementing world peace.

9 (b) PURPOSE OF ACT.—It is the purpose of this Act
10 to effectuate these policies by providing, among others, for
11 the following major programs;

12 (1) A program of assisting and fostering private re-
13 search and development on a truly independent basis to
14 encourage maximum scientific progress;

15 (2) A program for the free dissemination of basic scien-
16 tific information and for maximum liberality in dissemination
17 of related technical information;

18 (3) A program of federally conducted research to
19 assure the Government of adequate scientific and technical
20 accomplishment;

21 (4) A program for Government control of the produc-
22 tion, ownership, and use of fissionable materials to protect
23 the national security and to insure the broadest possible
24 exploitation of the field;

25 (5) A program for simultaneous study of the social,

1 political, and economic effects of the utilization of atomic
2 energy; and

3 (6) A program of administration which will be con-
4 sistent with international agreements made by the United
5 States, and which will enable the Congress to be currently
6 informed so as to take further legislative action as may
7 hereafter be appropriate.

8 ATOMIC ENERGY COMMISSION

9 SEC. 2. (a) There is hereby established an Atomic
10 Energy Commission (herein called the Commission), which
11 shall be composed of five members. Three members shall
12 constitute a quorum of the Commission. The President shall
13 designate one member as Chairman of the Commission.

14 (b) Members of the Commission shall be appointed by
15 the President, by and with the advice and consent of the
16 Senate, and shall serve at the pleasure of the President. In
17 submitting nominations to the Senate, the President shall set
18 forth the experience and qualifications of each person so
19 nominated. Each member, except the Chairman, shall re-
20 ceive compensation at the rate of \$15,000 per annum; the
21 Chairman shall receive compensation at the rate of \$20,000
22 per annum. No member of the Commission shall engage in
23 any other business, vocation, or employment than that of
24 serving as a member of the Commission.

25 (c) The principal office of the Commission shall be in

1 the District of Columbia, but the Commission may exercise
2 any or all of its powers in any place. The Commission shall
3 hold such meetings, conduct such hearings, and receive such
4 reports as will enable it to meet its responsibilities for carry-
5 ing out the purposes of this Act.

6 RESEARCH

7 SEC. 3. (a) RESEARCH ASSISTANCE.—The Commis-
8 sion is directed to exercise its powers in such manner as
9 to insure the continued conduct of research and develop-
10 mental activities in the fields specified below by private
11 or public institutions or persons and to assist in the ac-
12 quisition of an ever-expanding fund of theoretical and prac-
13 tical knowledge in such fields. To this end the Commis-
14 sion is authorized and directed to make contracts, agree-
15 ments, arrangements, grants-in-aid, and loans—

16 (1) for the conduct of research and developmental
17 activities relating to (a) nuclear processes; (b) the
18 theory and production of atomic energy, including
19 processes and devices related to such production; (c)
20 utilization of fissionable and radioactive materials for
21 medical or health purposes; (d) utilization of fission-
22 able and radioactive materials for all other purposes,
23 including industrial uses; and (e) the protection of
24 health during research and production activities; and

25 (2) for studies of the social, political, and economic

1 effects of the availability and utilization of atomic
2 energy.

3 The Commission may make partial advance payments on
4 such contracts and arrangements. Such contracts or other
5 arrangements may contain provisions to protect health, to
6 minimize danger from explosion, and for reporting and in-
7 spection of work performed thereunder as the Commission
8 may determine, but shall not contain any provisions or con-
9 ditions which prevent the dissemination of scientific or tech-
10 nical information, except to the extent already required by
11 the Espionage Act.

12 (b) FEDERAL ATOMIC RESEARCH.—The Commission
13 is authorized and directed to conduct research and develop-
14 mental activities through its own facilities in the fields speci-
15 fied in (a) above.

16 PRODUCTION OF FISSIONABLE MATERIALS

17 SEC. 4. (a) DEFINITION.—The term “production of
18 fissionable materials” shall include all methods of manufactur-
19 ing, producing, refining, or processing fissionable materials,
20 including the process of separating fissionable material from
21 other substances in which such material may be contained,
22 whether by thermal diffusion, electromagnetic separation, or
23 other processes.

24 (b) AUTHORITY TO PRODUCE.—The Commission shall
25 be the exclusive producer of fissionable materials, except pro-

1 duction incident to research or developmental activities sub-
2 ject to the restrictions provided in subparagraph (d) below.
3 The quantities of fissionable material to be produced in any
4 quarter shall be determined by the President.

5 (c) PROHIBITION.—It shall be unlawful for any person
6 to produce any fissionable material except as may be incident
7 to the conduct of research or developmental activities.

8 (d) RESEARCH AND DEVELOPMENT ON PRODUCTION
9 PROCESSES. (1) The Commission shall establish by regula-
10 tion such requirements for the reporting of research and de-
11 velopmental activities on the production of fissionable mate-
12 rials as will assure the Commission of full knowledge of all
13 such activities, rates of production, and quantities produced.

14 (2) The Commission shall provide for the frequent
15 inspection of all such activities by employees of the Com-
16 mission.

17 (3) No person may in the course of such research or
18 developmental activities possess or operate facilities for the
19 production of fissionable materials in quantities or at a rate
20 sufficient to construct a bomb or other military weapon
21 unless all such facilities are the property of and subject to
22 the control of the Commission. The Commission is author-
23 ized, to the extent that it deems such action consistent with
24 the purposes of this Act, to enter into contracts for the

1 conduct of such research or developmental activities involv-
2 ing the use of the Commission's facilities.

3 (e) EXISTING CONTRACTS.—The Commission is au-
4 thorized to continue in effect and modify such contracts
5 for the production of fissionable materials as may have been
6 made prior to the effective date of this Act, except that, as
7 rapidly as practicable, and in any event not more than one
8 year after the effective date of this Act, the Commission
9 shall arrange for the exclusive operation of facilities employed
10 in the manufacture of fissionable materials by employees
11 of the Commission.

12 CONTROL OF MATERIALS

13 SEC. 5. (a) FISSIONABLE MATERIALS.—

14 (1) DEFINITION.—The term “fissionable materials”
15 shall include plutonium, uranium 235, and such other ma-
16 terials as the Commission may from time to time determine
17 to be capable of releasing substantial quantities of energy
18 through nuclear fission of the material.

19 (2) PRIVATELY OWNED FISSIONABLE MATERIALS.—

20 Any person owning any right, title, or interest in or to any
21 fissionable material shall forthwith transfer all such right,
22 title, or interest to the Commission.

23 (3) PROHIBITION.—It shall be unlawful for any per-
24 son to (a) own any fissionable material; or (b) after sixty
25 days after the effective date of this Act and except as

1 authorized by the Commission possess any fissionable ma-
2 terial; or (c) export from or import into the United States
3 any fissionable material, or directly or indirectly be a party
4 to or in any way a beneficiary of, any contract, arrange-
5 ment, or other activity pertaining to the production, refin-
6 ing, or processing of any fissionable material outside of the
7 United States.

8 (4) DISTRIBUTION OF FISSIONABLE MATERIALS.—

9 The Commission is authorized and directed to distribute
10 fissionable materials to all applicants requesting such ma-
11 terials for the conduct of research or developmental activities
12 either independently or under contract or other arrangement
13 with the Commission. If sufficient materials are not avail-
14 able to meet all such requests, and applications for licenses
15 under section 7, the Commission shall allocate fissionable
16 materials among all such applicants in the manner best
17 calculated to encourage independent research and develop-
18 ment by making adequate fissionable materials available for
19 such purposes. The Commission shall refuse to distribute
20 or allocate any materials to any applicant, or shall recall
21 any materials after distribution or allocation from any appli-
22 cant, who is not equipped or who fails to observe such safety
23 standards to protect health and to minimize danger from
24 explosion as may be established by the Commission.

25 (b) SOURCE MATERIALS.—

1 (1) DEFINITION.—The term “source materials” shall
2 include any ore containing uranium, thorium, or beryllium,
3 and such other materials peculiarly essential to the produc-
4 tion of fissionable materials as may be determined by the
5 Commission with the approval of the President.

6 (2) LICENSE FOR TRANSFERS REQUIRED.—No per-
7 son may transfer possession or title to any source material
8 after mining, extraction, or removal from its place of origin,
9 and no person may receive any source material, without a
10 license from the Commission.

11 (3) ISSUANCE OF LICENSES.—Any person desiring
12 to transfer or receive possession of any source material shall
13 apply for a license therefor in accordance with such proce-
14 dures as the Commission may by regulation establish. The
15 Commission shall establish such standards for the issuance
16 or refusal of licenses as it may deem necessary to assure
17 adequate source materials for production, research, or de-
18 velopmental activities pursuant to this Act or to prevent the
19 use of such materials in a manner inconsistent with the na-
20 tional welfare.

21 (4) REPORTING.—The Commission is authorized to
22 issue such regulations or orders requiring reports of owner-
23 ship, possession, extraction, refining, shipment, or other
24 handling of source materials as it may deem necessary.

1 (c) BYPRODUCT MATERIALS.—

2 (1) DEFINITION.—The term “byproduct material”
3 shall be deemed to refer to all materials (except fissionable
4 material) yielded in the processes of producing fissionable
5 material.

6 (2) DISTRIBUTION.—The Commission is authorized
7 and directed to distribute, with or without charge, byproduct
8 materials to all applicants seeking such materials for research
9 or developmental work, medical therapy, industrial uses, or
10 such other useful applications as may be developed. If suf-
11 ficient materials to meet all such requests are not available,
12 the Commission shall allocate such materials among appli-
13 cants therefor, giving preference to the use of such materials
14 in the conduct of research and developmental activity and
15 medical therapy. The Commission shall refuse to distribute
16 or allocate any byproduct materials to any applicant, or
17 recall any materials after distribution or allocation from any
18 applicant, who is not equipped or who fails to observe such
19 safety standards to protect health as may be established
20 by the Commission.

21 (d) GENERAL PROVISIONS.—(1) The Commission is
22 authorized to—

23 (i) acquire or purchase fissionable or source
24 materials within the United States or elsewhere;

25 (ii) take, requisition, or condemn within the

1 United States any fissionable or source material and
2 make just compensation therefor. The Commission shall
3 determine such compensation. In the exercise of such
4 rights of eminent domain and condemnation, proceed-
5 ings may be instituted under the Act of August 1, 1888
6 (U. S. C. 1940, title 40, sec. 257), or any other appli-
7 cable Federal statute. Upon or after the filing of the
8 condemnation petition, immediate possession may be
9 taken and the property may be treated by the Commis-
10 sion in the same manner as other similar property owned
11 by it;

12 (iii) conduct exploratory operations, investigations,
13 inspections to determine the location, extent, mode of
14 occurrence, use, or condition of source materials with or
15 without the consent of the owner of any interest therein,
16 making just compensation for any damage or injury oc-
17 casioned thereby.

18 (2) The Commission shall establish by regulation a
19 procedure by which any person who is dissatisfied with its
20 action in allocating, refusing to allocate, or in rescinding any
21 allocation of fissionable, source, or byproduct materials to
22 him may obtain a review of such determination by a board
23 of appeal consisting of two or more members appointed by
24 the Commission and at least one member of the Commission.

1 MILITARY APPLICATIONS OF ATOMIC POWER

2 SEC. 6. (a) The Commission is authorized and directed
3 to—

4 (1) conduct experiments and do research and de-
5 velopmental work in the military application of atomic
6 power; and

7 (2) have custody of all assembled or unassembled
8 atomic bombs, bomb parts, or other atomic military
9 weapons, presently or hereafter produced, except that
10 upon the express finding of the President that such
11 action is required in the interests of national defense,
12 the Commission shall deliver such quantities of weapons
13 to the armed forces as the President may specify.

14 (b) The Commission shall not conduct any research
15 or developmental work in the military application of atomic
16 power if such research or developmental work is contrary
17 to any international agreement of the United States.

18 (c) The Commission is authorized to engage in the
19 production of atomic bombs, bomb parts, or other applica-
20 tions of atomic power as military weapons, only to the
21 extent that the express consent and direction of the Presi-
22 dent of the United States has been obtained, which consent
23 and direction shall be obtained for each quarter.

24 (d) It shall be unlawful for any person to manufacture,
25 produce, or process any device or equipment designed to

1 utilize fissionable materials as a military weapon, except
2 as authorized by the Commission.

3 ATOMIC ENERGY DEVICES

4 SEC. 7. (a) LICENSE REQUIRED.—It shall be un-
5 lawful for any person to operate any equipment or device
6 utilizing fissionable materials without a license issued by
7 the Commission authorizing such operation.

8 (b) ISSUANCE OF LICENSES.—Any person desiring to
9 utilize fissionable materials in any such device or equipment
10 shall apply for a license therefor in accordance with such
11 procedures as the Commission may by regulation establish.
12 The Commission is authorized and directed to issue such a
13 license on a nonexclusive basis and to supply appropriate
14 quantities of fissionable materials to the extent available to
15 any applicant (1) who is equipped to observe such safety
16 standards to protect health and to minimize danger from
17 explosion as the Commission may establish; and (2) who
18 agrees to make available to the Commission such technical
19 information and data concerning the operation of such device
20 as the Commission may determine necessary to encourage
21 the use of such devices by as many licensees as possible.
22 Where any license might serve to maintain or foster the
23 growth of monopoly, restraint of trade, unlawful competition,
24 or other trade position inimical to the entry of new, freely

1 competitive enterprises, the Commission is authorized and
2 directed to refuse to issue such license or to establish such
3 conditions to prevent these results as the Commission, in
4 consultation with the Attorney General, may determine.
5 The Commission shall report promptly to the Attorney
6 General any information it may have of the use of such de-
7 vices which appears to have these results. No license may
8 be given to a foreign government or to any person who is
9 not under and within the jurisdiction of the United States.

10 (c) BYPRODUCT POWER.—If in the production of fis-
11 sionable materials the production processes yield energy
12 capable of utilization, such energy may be used by the Com-
13 mission, transferred to other Government agencies, sold to
14 public or private utilities under contract providing for reason-
15 able resale prices, or sold to private consumers at reasonable
16 rates and on as broad a basis of eligibility as the Commission
17 may determine to be possible.

18 (d) REPORTS TO CONGRESS.—Whenever in its opin-
19 ion industrial, commercial, or other uses of fissionable mate-
20 rials have been sufficiently developed to be of practical
21 value, the Commission shall prepare a report to the Con-
22 gress stating all the facts, the Commission's estimate of the
23 social, political, and economic effects of such utilization, and
24 the Commission's recommendations for necessary or desir-
25 able supplemental legislation. Until such a report has been

1 filed with the Commission and the period of ninety days has
2 elapsed after such filing, within which period the Commis-
3 sion may adopt supplemental legislation, no license for the
4 use of atomic energy devices shall be issued by the
5 Commission.

6 PROPERTY OF THE COMMISSION

7 SEC. 8. (a) The President shall direct the transfer
8 to the Commission of the following property owned by the
9 United States or any of its agencies, or any interest in such
10 property held in trust for or on behalf of the United States:

11 (1) All fissionable materials; all bombs and bomb parts;
12 all plants, facilities, equipment, and materials for the process-
13 ing or production of fissionable materials, bombs, and bomb
14 parts; all processes and technical information of any kind,
15 and the source thereof (including data, drawings, specifica-
16 tions, patents, patent applications, and other sources, relating
17 to the refining or production of fissionable materials; and all
18 contracts, agreements, leases, patents, applications for patents,
19 inventions and discoveries (whether patented or unpatented),
20 and other rights of any kind concerning any such items;

21 (2) All facilities and equipment, and materials therein,
22 devoted primarily to atomic energy research and develop-
23 ment; and

24 (3) All property in the custody and control of the
25 Manhattan engineer district.

(b) In order to render financial assistance to those States and local governments in which the activities of the Commission are carried on and in which the Commission, or its agents, have acquired properties previously subject to State and local taxation, the Commission is authorized to make payments to State and local governments in lieu of such taxes. Such payments may be in the amounts, at the times, and upon the terms the Commission deems appropriate, but the Commission shall be guided by the policy of not exceeding the taxes which would have been payable for such property in the condition in which it was acquired, except where special burdens have been cast upon the State or local government by activities of the Commission, the Manhattan engineer district, or their agents, and in such cases any benefits accruing to the States and local governments by reason of these activities shall be considered in the determination of such payments. The Commission and any corporation created by it, and the property and income of the Commission or of such corporation, are hereby expressly exempted from taxation in any manner or form by any State, county, municipality, or any subdivision thereof.

DISSEMINATION OF INFORMATION

SEC. 9. (a) BASIC SCIENTIFIC INFORMATION.—Basic scientific information in the fields specified in section 3 may

1 be freely disseminated. The term "basic scientific informa-
2 tion" shall include, in addition to theoretical knowledge of
3 nuclear and other physics, chemistry, biology, and therapy,
4 all results capable of accomplishment, as distinguished from
5 the processes or techniques of accomplishing them.

6 (b) RELATED TECHNICAL INFORMATION.—The Com-
7 mission shall establish a Board of Atomic Information con-
8 sisting of one or more employees and at least one member
9 of the Commission. The Board shall, under the direction
10 and supervision of the Commission, provide for the dissemi-
11 nation of related technical information with the utmost lib-
12 erality as freely as may be consistent with the foreign and
13 domestic policies established by the President and shall have
14 authority to—

15 (1) establish such information services, publica-
16 tions, libraries, and other registers of available informa-
17 tion as may be helpful in effectuating this policy;

18 (2) designate by regulation the types of related
19 technical information the dissemination of which will
20 effectuate the foregoing policy. Such designations shall
21 constitute an administrative determination that such in-
22 formation is not of value to the national defense and that
23 any person is entitled to receive such information, within
24 the meaning of the Espionage Act. Failure to make
25 any such designation shall not, however, be deemed a

1 determination that such undesignated information is sub-
2 ject to the provisions of said Act;

3 (3) by regulation or order, require reports of the
4 conduct of independent research or development activ-
5 ities in the fields specified in section 3 and of the oper-
6 ation of atomic energy devices under licenses issued pur-
7 suant to section 7;

8 (4) provide for such inspections of independent re-
9 search and development activities of the types specified
10 in section 3 and of the operation of atomic energy de-
11 vices as the Commission or the Board may determine;
12 and

13 (5) whenever it will facilitate the carrying out of
14 the purposes of the Act, adopt by regulation adminis-
15 trative interpretations of the Espionage Act except that
16 any such interpretation shall, before adoption, receive
17 the express approval of the President.

18 PATENTS

19 SEC. 10. (a) Whenever any person invents a device or
20 method for the production, refining, or other processing of
21 fissionable material: (i) he may file a patent application to
22 cover such invention, sending a copy thereof to the Commis-
23 sion; (ii) if the Commissioner of Patents determines that the
24 invention is patentable, he shall issue a patent in the name of
25 the Commission; and (iii) the Commission shall make just

1 compensation to such person. The Commission shall appoint
2 a Patent Royalty Board consisting of one or more employees
3 and at least one member of the Commission, and the Commis-
4 sioner of Patents. The Patent Royalty Board shall deter-
5 mine what constitutes just compensation in each such case
6 and whether such compensation is to be paid in periodic pay-
7 ments rather than in a lump sum. Any person to whom any
8 such patent has heretofore been issued shall forthwith transfer
9 all right, title, and interest in and to such patent to the Com-
10 mission and shall receive therefor just compensation as pro-
11 vided above.

12 (b) (1) Any patent now or hereafter issued covering
13 any process or device utilizing or peculiarly necessary to the
14 utilization of fissionable materials, or peculiarly necessary to
15 the conduct of research or developmental activities in the
16 fields specified in section 3, is hereby declared to be affected
17 with the public interest and its general availability for such
18 uses is declared to be necessary to effectuate the purposes of
19 this Act.

20 (2) Any person to whom any such patent has been
21 issued, or any person desiring to use any device or process
22 covered by such patent for such uses, may apply to the
23 Patent Royalty Board, for determination by such Board of
24 a reasonable royalty fee for such use of the patented process

1 or device intended to be used under the Commission's
2 license.

3 (3) In determining such reasonable royalty fee, the
4 Patent Royalty Board shall take into consideration any
5 defense, general or special, that might be pleaded by a
6 defendant in an action for infringement, the extent to which,
7 if any, such patent was developed through federally fi-
8 nanced research, the degree of utility, novelty, and im-
9 portance of the patent, the cost to the patentee of developing
10 such process or device, and a reasonable rate of return on
11 such research investment by the patentee.

12 (4) No court, Federal, State, or Territorial, shall have
13 jurisdiction or power to stay, restrain, or otherwise enjoin
14 any such use of any such patented device or process by
15 any person on the ground of infringement of such patent.
16 In any action for infringement of any such patent filed in
17 any such court, the court shall have authority only to order
18 the payment of reasonable royalty fees and attorney's fees
19 and court costs as damages for any such infringement. If
20 the Patent Royalty Board has not previously determined
21 the reasonable royalty fee for the use of the patented device
22 or process involved in any case, the court in such case shall,
23 before entering judgment, obtain from the Patent Royalty
24 Board a report containing its recommendation as to the
25 reasonable royalty fee it would have established had ap-

1 plication been made to it as provided in subparagraphs 2
2 and 3 above.

3 ORGANIZATION AND GENERAL AUTHORITY :

4 SEC. 11. (a) ORGANIZATION.—There are hereby es-
5 tablished within the Commission a Division of Research, a
6 Division of Production, a Division of Materials, and a Divi-
7 sion of Military Application. Each division shall be under
8 the direction of a Director who shall be appointed by the
9 President, by and with the advice and consent of the Senate,
10 and shall receive compensation at the rate of \$15,000 per
11 annum. The Commission shall delegate to each such
12 division such of its powers under this Act as in its opinion
13 from time to time will promote the effectuation of the
14 purposes of this Act in an efficient manner. Nothing in
15 this paragraph shall prevent the Commission from estab-
16 lishing such additional divisions or other subordinate or-
17 ganizations as it may deem desirable.

18 (b) GENERAL AUTHORITY.—In the performance of
19 its functions the Commission is authorized to—

20 (1) establish advisory boards to advise with and
21 make recommendations to the Commission on legisla-
22 tion, policies, administration, and research;

23 (2) establish by regulation or order such stand-
24 ards and instructions to govern the possession and use
25 of fissionable and byproduct materials as the Commis-

sion may deem necessary or desirable to protect health or to minimize danger from explosion:

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this Act, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to require any person to permit the inspection and copying of any records or other documents, to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) create or organize corporations, the stock of which shall be wholly owned by the United States and controlled by the Commission, to carry out the provisions of this Act;

(5) appoint and fix the compensation of such officers and employees as may be necessary to carry out the functions of the Commission. All such officers and employees shall be appointed in accordance with the civil-service laws and their compensation fixed in accordance

1 with the Classification Act of 1923, as amended, except
2 that expert administrative, technical, and professional
3 personnel may be employed and their compensation fixed
4 without regard to such laws. The Commission shall
5 make adequate provision for administrative review by a
6 board consisting of one or more employees and at least
7 one member of the Commission of any determination to
8 dismiss any scientific or professional employee; and

9 (6) acquire such materials, property, equipment,
10 and facilities, establish or construct such buildings and
11 facilities, modify such building and facilities from time to
12 time, and construct, acquire, provide, or arrange for such
13 facilities and services for the housing, health, safety, wel-
14 fare, and recreation of personnel employed by the Com-
15 mission as it may deem necessary.

16 ENFORCEMENT

17 SEC. 12. (a) Any person who willfully violates, at-
18 tempts to violate, or conspires to violate, any of the provisions
19 of this Act or any regulations or orders issued thereunder
20 shall, upon conviction thereof, be punishable by a fine of not
21 more than \$10,000, or by imprisonment for a term of not
22 exceeding five years, or both.

23 (b) Whenever in the judgment of the Commission any
24 person has engaged or is about to engage in any acts or prac-
25 tices which constitute or will constitute a violation of any pro-

1 vision of this Act, it may make application to the appropriate
2 court for an order enjoining such acts or practices, or for an
3 order enforcing compliance with such provision, and upon a
4 showing by the Commission that such person has engaged
5 or is about to engage in any such acts or practices a perma-
6 nent or temporary injunction, restraining order, or other
7 order shall be granted without bond.

8 (c) In case of contumacy by, or refusal to obey a
9 subpoena served upon, any person pursuant to section 11
10 (b) (3), the district court for any district in which such
11 person is found or resides or transacts business, upon ap-
12 plication by the Commission, shall have jurisdiction to issue
13 an order requiring such person to appear and give testi-
14 mony or to appear and produce documents, or both; and
15 any failure to obey such order of the court may be punished
16 by such court as a contempt thereof.

17 REPORTS

18 SEC. 13. The Commission shall, on the first days of
19 January, April, July, and October, submit reports to the
20 President, to the Senate and to the House of Representa-
21 tives. Such reports shall summarize and appraise the ac-
22 tivities of the Commission and of each division and board
23 thereof, and specifically shall contain financial statements;
24 lists of licenses issued, of property acquired, of research
25 contracts and arrangements entered into, and of the amounts

1 of fissionable material and the persons to whom allocated;
2 the Commission's program for the following quarter includ-
3 ing lists of research contracts and arrangement proposed
4 to be entered into; conclusions drawn from studies of the
5 social, political, and economic effects of the release of atomic
6 energy; and such recommendations for additional legislation
7 as the Commission may deem necessary or desirable.

8 DEFINITIONS

9 SEC. 14. As used in this Act—

10 (a) The term "atomic energy" shall include all forms
11 of energy liberated in the artificial transmutation of atomic
12 species.

13 (b) The term "Government agency" means any execu-
14 tive department, board, bureau, commission, or other agency
15 in the executive branch of the Federal Government, or any
16 corporation wholly owned (either directly or through one or
17 more corporations) by the United States.

18 (c) The term "person" means any individual, corpora-
19 tion, partnership, firm, association, trust, estate, public or
20 private institution, group, any government other than the
21 United States, any political subdivision of any such govern-
22 ment, and any legal successor, representative, agent, or
23 agency of the foregoing, or other entity.

24 (d) The term "United States" includes all Territories
25 and possessions of the United States.

APPROPRIATIONS

1
2 SEC. 15. There are hereby authorized to be appropriated
3 such sums as may be necessary and appropriate to carry out
4 the provisions and purposes of this Act. Funds appropriated
5 to the Commission shall, if obligated during the fiscal year
6 for which appropriated, remain available for expenditure
7 for four years following the expiration of the fiscal year for
8 which appropriated. After such four-year period, the un-
9 expended balances of appropriations shall be carried to the
10 surplus fund and covered into the Treasury.

SEPARABILITY OF PROVISIONS

11
12 SEC. 16. If any provision of this Act, or the applica-
13 tion of such provision to any person or circumstances, is
14 held invalid, the remainder of this Act or the application
15 of such provision to persons or circumstances other than
16 those to which it is held invalid, shall not be affected thereby.

SHORT TITLE

17
18 SEC. 17. This Act may be cited as the "Atomic Energy
19 Act of 1946".

79TH CONGRESS
1ST Session

S. 1717

A BILL

For the development and control of atomic
energy.

By Mr. McMAHON

DECEMBER 20 (legislative day, DECEMBER 19), 1945

Read twice and referred to the Special Committee on
Atomic Energy

May 29

79TH CONGRESS
2D SESSION

S. 1717

IN THE SENATE OF THE UNITED STATES

MARCH 29 (legislative day, MARCH 5), 1946

Referred to the Special Committee on Atomic Energy and ordered to be printed

AMENDMENT

Intended to be proposed by Mr. JOHNSON of Colorado to the bill (S. 1717) for the development and control of atomic energy, viz: On page 3, beginning with line 9, strike out all down to and including line 5 on page 3, and insert in lieu thereof the following:

1 SEC. 2. (a) ATOMIC ENERGY COMMISSION.—

2 (1) There is hereby established an Atomic Energy
3 Commission (hereinafter referred to as the "Commission")
4 to be composed of nine members, five of whom shall be ap-
5 pointed by the President by and with the advice and consent
6 of the Senate (hereinafter referred to as "appointed mem-
7 bers"). The Under Secretary of State, the Assistant Secre-
8 tary of War, the Assistant Secretary of the Navy, and the

1 Assistant Secretary of War for Air shall be ex officio mem-
2 bers of the Commission and as such shall have full powers as
3 members of the Commission. Five members shall constitute
4 a quorum of the Commission. The President shall designate
5 one of the appointed members as Chairman of the Com-
6 mission.

7 (2) In submitting to the Senate the nomination of any
8 individual to be an appointed member of the Commission, the
9 President shall set forth the experience and the qualifications
10 of the nominee. The term of office of each appointed member
11 of the Commission taking office prior to the expiration of two
12 years after the date of enactment of this Act shall expire upon
13 the expiration of such two years. The term of office of each
14 appointed member of the Commission taking office after the
15 expiration of two years from the date of enactment of this
16 Act shall be five years, except that (A) the terms of office of
17 the appointed members first taking office after the expiration
18 of two years from the date of enactment of this Act shall ex-
19 pire, as designated by the President at the time of appoint-
20 ment, one at the end of three years, one at the end of four
21 years, one at the end of five years, one at the end of six years,
22 and one at the end of seven years, after the date of enactment
23 of this Act; and (B) any appointed member appointed to fill
24 a vacancy occurring prior to the expiration of the term for
25 which his predecessor was appointed, shall be appointed for

1 the remainder of such term. Any appointed member of the
2 Commission may be removed by the President for inefficiency,
3 neglect of duty, or malfeasance in office. Each appointed
4 member, except the Chairman, shall receive compensation at
5 the rate of \$15,000 per annum; and the Chairman shall re-
6 ceive compensation at the rate of \$17,500 per annum. No
7 appointed member of the Commission shall engage in any
8 other business, vocation, or employment than that of serving
9 as a member of the Commission. The ex officio members of
10 the Commission shall receive no additional compensation for
11 the performance of their duties as members of the Commission.

12 (3) The principal office of the Commission shall be in
13 the District of Columbia, but the Commission or any duly
14 authorized representative may exercise any or all of its
15 powers in any place. The Commission shall hold such meet-
16 ings, conduct such hearings, and receive such reports as may
17 be necessary to enable it to carry out the provisions of
18 this Act.

19 (b) SPECIAL FUNCTIONS OF EX OFFICIO MEM-
20 BERS.—If the Under Secretary of State at any time con-
21 cludes that any action, proposed action, or failure to act,
22 of the Commission jeopardizes the foreign relations or the
23 foreign policy of the United States or is contrary to the
24 provisions of any international arrangement, he may appeal
25 such action, proposed action, or failure to act to the Presi-

1 dent, whose decision shall be final. If any other ex officio
 2 member of the Commission at any time concludes that any
 3 action, proposed action, or failure to act of the Commission
 4 is inimical to the common defense and security, he may
 5 appeal such action, proposed action, or failure to act to the
 6 President, whose decision shall be final.

79TH CONGRESS
 2D Session

S. 1717

AMENDMENT

Intended to be proposed by Mr. JOHNSON of
 Colorado to the bill (S. 1717) for the devel-
 opment and control of atomic energy.

MARCH 29 (legislative day, March 5), 1946
 Referred to the Special Committee on Atomic Energy
 and ordered to be printed

Apr. 19

DIGEST OF
CONGRESSIONAL PROCEEDINGS
OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF BUDGET AND FINANCE

Legislative Reports and Service Section
(For Department staff only)

Issued April 22, 1946
For actions of April 19, 1946
79th-2nd, No. 73

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HIGHLIGHTS: Sen. Reed criticized USDA's handling of wheat and bread situation. Senate received supplemental appropriation estimate of \$195,100 for rubber research project. Senate agreed to House amendments to bill making veterans' preferences for surplus property next to Federal Government's; ready for President. Sen. Thomas, Okla., introduced bill to establish central PMA administrative expense account. Sen. Thomas, Okla., introduced bill to extend Soil Conservation and Domestic Allotment Act to Virgin Islands.

SENATE

- 1. WHEAT AND FLOUR.** Sen. Reed, Kans., criticized this Department's handling of the wheat and bread situation and included a constituent's letter on the subject (pp. 4139-40).
- 2. RUBBER; APPROPRIATIONS.** Received from the President a supplemental appropriation estimate of \$195,100 to continue research on rubber-bearing plants and on extraction and processing of rubber (\$150,000, BA&IC and \$45,100, BPISAE) (S.Doc.172) (p. 4104).
- 3. PRICE CONTROL.** Sen. Langer, N.Dak., inserted Cooperative Store Assn. (Maddock, N. Dak.) and Farmers' Union (Fargo, N.Dak.) resolutions favoring the continuation of price control (p. 4106).
Sen. Langer, N.Dak., inserted a Wyndmere Cooperative Shipping Assn. resolution opposing price control and subsidies for the livestock industry (p. 4106).
Sen. Langer, N.Dak., inserted a Vegetable Growers' Assn. of America resolution opposing price ceilings on perishable vegetables and favoring the Hobbs antiracketeering bill (pp. 4106-7).
Sen. Wherry, Nebr., criticized OPA's "gestapo methods" of enforcement, commended its drive to enforce sugar regulations, and included a court decision on an alleged violation case (pp. 4127-9).
- 4. SURPLUS PROPERTY; VETERANS.** Agreed to the House amendments to S. 1757, to make veterans' priorities next to those of the Federal Government, provide that certain personal property be set aside for veterans without regard to priorities, provide for a time limit of not over 20 days within which the Government agencies must exercise their priorities, and prohibit transfer of property between Government agencies, without reimbursement or transfer of funds, on authority of any law approved before June 22, 1944 (pp. 4110-3). This bill will now be sent to the President.
- AIRPORTS.** Agreed to defer until Tues., Apr. 23, consideration of the conference report on S. 2, the Federal-aid airport bill (pp. 4108-10).

6. BRITISH LOANS. Continued debate on S. J. Res. 138, to authorize the loan to Great Britain (pp. 4106, 4129-39, 4140-2, 4151). During the debate Sen. Butler Nebr., compared the British loan terms with those of loans made by Federal lending agencies to farmers, veterans, small business, etc. (pp. 4137-9) and Sen. Langer, N.Dak., discussed living costs in Alaska, including tabulations on the subject (pp. 4141-3).
7. VETERANS. Agreed to the conference report on S. 1152, to effectuate the purposes of the GI Bill of Rights in D.C. (p. 4151).
8. FOREIGN RELIEF. Sen. Mead, N.Y., spoke on UNRRA's needs in order to carry out its foreign-relief program (pp. 4147-50).
9. LAND-USE PLANNING. Sen. Langer, N.Dak., inserted a N. Dak. Agricultural Advisory Council resolution urging that provisions be made to resume local land-use planning (p. 4107).
10. RESEARCH; ATOMIC ENERGY. The Special Atomic Energy Committee reported with an amendment S. 1717, for the development and control of atomic energy (S. Rept. 1211) (p. 4107).
11. PHILIPPINE REHABILITATION. Agreed to conference report on S. 1610, to provide for the rehabilitation of the Philippines (pp. 4113-5). The House has not acted on the report.
12. WAR DEPARTMENT CIVIL APPROPRIATION BILL. Agreed to the conference report and the amendments in disagreement on this bill, H.R. 5400, which includes flood-control appropriations for the War Department (pp. 4114-5). This bill will now be sent to the President.
13. ADJOURNED until Mon., Apr. 22 (p. 4151).

HOUSE

NOT IN SESSION. Next meeting Tues., Apr. 30.

14. BUILDINGS AND GROUNDS. In reporting H.R. 5407 (see Digest 71) to grant FWA certain powers with respect to site acquisition, building construction, purchase of buildings, etc., the Public Buildings and Grounds Committee struck out the provision granting the Commissioner of Public Buildings exclusive authority to enter into food contracts in Government buildings.

BILLS INTRODUCED

15. PERSONNEL; EMPLOYMENT. H.R. 6206 (see Digest 72) would repeal the provision of law which prevents a retired commissioned officer of the U.S. from holding a civilian office or position in the Federal service if the salary combined with his retired pay exceeds \$3,000, and amends, by including personnel of the Public Health Service and the Coast and Geodetic Survey, the provision exempting retired personnel from the prohibition against holding any other Government elective or appointive position to which compensation is attached while already employed at a salary of \$2,500.
16. FORESTRY. H.R. 6201 (see Digest 72) establishes a Franklin Delano Roosevelt Memorial Redwood Forest in Calif.; authorizes this Department to cooperate with Calif. recreation industries and to provide suitable roads, trails, recreation areas, etc. and train and provide personnel to aid in the use and enjoyment of the forest; authorizes this Department to acquire lands for the site of the memorial, the Interior Department to administer the memorial units of the forest, and log cutting or harvesting and utilization of forest products to be

resolution in the hands of all United States Representatives and Senators and request legislation to remedy said labor extortion.

In that there is a certain labor practice in force, namely, in certain cities drivers of farmers' trucks are forcibly forbidden from delivering their produce to terminal markets and warehouses unless extortion is paid to local teamsters' unions: Be it

Resolved, That the secretary of the V. G. A. of A. be instructed to place a copy of this resolution in the hands of all United States Representatives and Senators and request legislation to remedy said labor extortion; therefore be it

Resolved, That we urge the Senate and Legislature to vote for the Hobbs bill, H. R. 32.

Resolution 6

We are opposed to passage of the so-called Fair Employment Practice Control Act because we believe in the American practice that an employer should be allowed to hire any employee he wishes, regardless of race or creed.

RESUMPTION OF LOCAL LAND-USE PLANNING

Mr. LANGER. Mr. President, I ask unanimous consent to have printed in the RECORD a resolution adopted by farmer members of the North Dakota Agricultural Advisory Council, relating to the resumption of local land-use planning.

There being no objection, the resolution was ordered to be printed in the RECORD, as follows:

We, the farmer members of the North Dakota Agricultural Advisory Council, urge that provisions be made to resume local land-use planning with facilities and personnel to afford desirable and appropriate technical guidance and research to make possible greatest service and aid to the needs of the community and Nation with such coordinating mechanisms as will make these plans available for consideration and action on community, county, State, and national levels. We recommend also that these groups be elected by farmers at the same time as regular Production and Marketing Administration elections.

Obed A. Wyum, Rutland, N. Dak., Chairman, Farmers Committee, North Dakota Agricultural Advisory Council; Oscar Blessum, Rugby, N. Dak.; Harry Haroldson, Coateau, N. Dak.; John Kennedy, Voss, N. Dak.; H. W. McInnes, Kelson, N. Dak.; James Maher, Morristown, S. Dak.; Thore Naaden, Braddock, N. Dak.; John D. O'Keeffe, Lansford, N. Dak.; Ray Schnell, Dickinson, N. Dak.

REPORTS OF A COMMITTEE

The following reports of a committee were submitted:

By Mr. HUFFMAN, from the Committee on Claims:

H. R. 4174. A bill for the relief of Mayer G. Hansen; without amendment (Rept. No. 1212).

By Mr. WHERRY, from the Committee on Claims:

H. R. 2973. A bill for the relief of Ben Thomas Haynes, a minor; without amendment (Rept. No. 1213);

H. R. 3018. A bill for the relief of R. Fred Baker and Crystal R. Stribling; with amendments (Rept. No. 1216);

H. R. 3454. A bill for the relief of William Clyde McKinney; with an amendment (Rept. No. 1215); and

H. R. 4609. A bill for the relief of Jerome Dove; without amendment (Rept. No. 1214).

By Mr. WILEY, from the Committee on Claims:

H. R. 3618. A bill for the relief of Mrs. Vannas H. Hicks; without amendment (Rept. No. 1217); and

H. R. 4074. A bill for the relief of Mrs. Jennie Burnison; without amendment (Rept. No. 1218).

By Mr. ELLENDER, from the Committee on Claims:

S. 1061. A bill for the relief of Violet Ludokiewich; with amendments (Rept. No. 1226);

S. 1569. A bill for the relief of Gwynn C. Triplett, and for other purposes; without amendment (Rept. No. 1219);

H. R. 2188. A bill for the relief of George W. Bailey; without amendment (Rept. No. 1220);

H. R. 3100. A bill for the relief of the legal guardian of Rolland Lee Frank, a minor; with amendments (Rept. No. 1227);

H. R. 3823. A bill for the relief of Gertrude McGill; without amendment (Rept. No. 1221);

H. R. 4115. A bill for the relief of the estate of Eleanor Doris Barrett; without amendment (Rept. No. 1222);

H. R. 4210. A bill for the relief of the estate of Bob Clark and the estate of George D. Croft; without amendment (Rept. No. 1223);

H. R. 4270. A bill for the relief of Southern California Edison Co., Ltd.; without amendment (Rept. No. 1224);

H. R. 4400. A bill for the relief of Nolan V. Curry, individually, and as guardian for his minor son, Hershel Dean Curry; with amendments (Rept. No. 1228); and

H. R. 4537. A bill for the relief of Lillian Jacobs; without amendment (Rept. No. 1225).

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY—REPORT OF SPECIAL COMMITTEE ON ATOMIC ENERGY

Mr. McMAHON. Mr. President, from the Special Committee on Atomic Energy, I ask unanimous consent to report favorably with an amendment the bill (S. 1717) for the development and control of atomic energy, and I submit a report (No. 1211) thereon.

I wish to state to the Senate that the report I am submitting in connection with the bill is quite comprehensive. In addition to the regular report, it contains a clarifying article on the development and application of atomic energy by Dr. E. U. Condon, scientific adviser to the committee; reprints of various historical documents relating to the atomic bomb, a chronology of developments in nuclear physics and the atomic-bomb project, a glossary of scientific terms relating to atomic energy and a bibliography of books and articles on scientific and political aspects of atomic energy.

Because of the extreme importance of the subject matter I believe Senators will find it helpful to study the report as well as the provisions of the bill.

The PRESIDENT pro tempore. Without objection, the report will be received, and the bill will be placed on the calendar.

BILLS INTRODUCED

Bills were introduced, read the first time, and, by unanimous consent, the second time, and referred as follows:

By Mr. KILGORE:

S. 2082. A bill for the relief of Mary Lomas; to the Committee on Immigration.

By Mr. DOWNEY:

S. 2083. A bill to amend section 6 of the Classification Act of 1923, as amended; to the Committee on Civil Service.

S. 2084. A bill for the relief of H. T. Duffy; to the Committee on Claims.

By Mr. MEAD:

S. 2085. A bill to amend title V of the act entitled "An act to expedite the provision of housing in connection with the national defense, and for other purposes," approved October 14, 1940, as amended, to authorize the Federal Works Administrator to provide needed educational facilities, other than housing, to educational institutions furnishing courses of training or education to persons under title II of the Servicemen's Readjustment Act of 1944, as amended; to the Committee on Education and Labor.

By Mr. THOMAS of Oklahoma:

S. 2086. A bill to improve the administration of the Production and Marketing Administration, United States Department of Agriculture; and

S. 2087. A bill to amend section 17 (a) of the Soil Conservation and Domestic Allotment Act (49 Stat. 1151); to the Committee on Agriculture and Forestry.

By Mr. WHEELER:

S. 2088. A bill to establish a Federal Traffic Bureau, and for other purposes; to the Committee on Interstate Commerce.

By Mr. GOSSETT:

S. 2089. A bill to provide for assistance by the Federal Government in the control and eradication of noxious weeds; to the Committee on Agriculture and Forestry.

By Mr. McFARLAND:

S. 2090. A bill for the relief of the estate of Robert Clyde Johnson; to the Committee on Claims.

By Mr. McFARLAND (for himself, Mr. JOHNSON of Colorado, Mr. MAYBANK, Mr. CHAVEZ):

S. 2091. A bill to provide certain benefits with respect to accumulated leave in the case of persons who served as enlisted members of the armed forces during the war; to the Committee on Military Affairs.

By Mr. KNOWLAND:

S. 2092. A bill authorizing the Secretary of the Interior to prepare a roll of the Indians of California; to the Committee on Indian Affairs.

HOUSE BILLS REFERRED OR PLACED ON THE CALENDAR

The following bills were each read twice by their titles and referred or ordered to be placed on the calendar, as indicated:

H. R. 5433. An act to amend section 540 of title 10 and section 441 (a) of title 34 of the United States Code providing for the detail of United States military and naval missions to foreign governments; ordered to be placed on the calendar.

H. R. 5626. An act to authorize the Veterans' Administration to appoint and employ retired officers without affecting their retired status; and for other purposes; to the Committee on Military Affairs.

EXTENSION OF SELECTIVE TRAINING AND SERVICE ACT—AMENDMENT

Mr. GURNEY submitted an amendment intended to be proposed by him to the bill (S. 2057) to extend the Selective Training and Service Act of 1940, as amended, until May 15, 1947, and for other purposes, which was ordered to lie on the table and to be printed.

PROPOSED LOAN TO GREAT BRITAIN—AMENDMENTS

Mr. CAPEHART submitted amendments intended to be proposed by him to the joint resolution (S. J. Res. 138) to implement further the purposes of the Bretton Woods Agreements Act by authorizing the Secretary of the Treasury to carry out an agreement with the United Kingdom, and for other purposes,

which were ordered to lie on the table and to be printed.

HOUSING FOR PERSONS ATTENDING EDUCATIONAL INSTITUTIONS—AMENDMENTS

Mr. MEAD submitted amendments intended to be proposed by him to the bill (S. 1770) to amend the act entitled "An act to expedite the provision of housing in connection with the national defense, and for other purposes," approved October 14, 1940, as amended, to aid in providing housing for persons attending educational institutions in the pursuit of courses of training or education under title II of the Servicemen's Readjustment Act of 1944, which were referred to the Committee on Education and Labor and ordered to be printed.

AMENDMENT OF EMERGENCY PRICE CONTROL AND STABILIZATION ACTS OF 1942—AMENDMENT

Mr. McFARLAND (for himself, Mr. MURRAY, Mr. HAYDEN, Mr. JOHNSON of Colorado, Mr. THOMAS of Utah, Mr. MURDOCK, Mr. TAYLOR, Mr. HATCH, Mr. CHAVEZ, and Mr. WHEELER) submitted an amendment intended to be proposed by them, jointly, to the bill (S. 2028) to amend the Emergency Price Control Act of 1942, as amended, and the Stabilization Act of 1942, as amended, and for other purposes, which was referred to the Committee on Banking and Currency and ordered to be printed.

INVESTIGATION WITH RESPECT TO PETROLEUM RESOURCES IN RELATION TO THE NATIONAL WELFARE—LIMIT OF EXPENDITURES

Mr. O'MAHONEY submitted the following resolution (S. Res. 261), which was referred to the Committee To Audit and Control the Contingent Expenses of the Senate:

Resolved, That the limit of expenditures under Senate Resolution 253, Seventy-eighth Congress, second session, agreed to March 13, 1944, and Senate Resolution 36, Seventy-ninth Congress, first session, agreed to January 29, 1945 (relating to an investigation with respect to petroleum resources in relation to the national welfare) is hereby increased by \$10,000.

FLOSSIE I. FLETCHER

Mr. BARKLEY (for Mr. GLASS) submitted the following resolution (S. Res. 262), which was referred to the Committee To Audit and Control the Contingent Expenses of the Senate:

Resolved, That the Secretary of the Senate hereby is authorized and directed to pay from the contingent fund of the Senate to Flossie I. Fletcher, widow of Lewis H. Fletcher, late an employee of the Senate, a sum equal to 6 months' compensation at the rate he was receiving by law at the time of his death, said sum to be considered inclusive of funeral expenses and all other allowances.

EASTER IN THE ATOMIC AGE—ADDRESS BY SENATOR WILEY

[Mr. WILEY asked and obtained leave to have printed in the RECORD an address entitled "Easter in the Atomic Age," delivered by him over Wisconsin radio stations, which appears in the Appendix.]

MR. CHURCHILL GREET'S ARMY AND NAVY OFFICERS

[Mr. GREEN asked and obtained leave to have printed in the RECORD several addresses

made at an informal meeting between Mr. Winston Churchill and various Army and Navy officers in the office of the Secretary of War on March 9, 1946, which appear in the Appendix.]

ONE HUNDREDTH ANNIVERSARY OF GREEK INDEPENDENCE—ADDRESS BY P. ECONOMOU GOURAS

[Mr. KNOWLAND asked and obtained leave to have printed in the RECORD an address delivered by P. Economou Gouras, counselor of the Greek Embassy in Washington, D. C., on the occasion of the celebration of the one hundredth anniversary of Greek independence, on March 23, 1946, which appears in the Appendix.]

TREATMENT OF VETERANS—ARTICLE BY FRANCES LANGFORD

[Mr. KNOWLAND asked and obtained leave to have printed in the RECORD an article entitled "Vets' Bolstered Morale Shattered by New Blow," by Frances Langford, which appears in the Appendix.]

ADDRESS BY HON. JAMES P. McGRANERY BEFORE CATHOLIC PARENT-TEACHERS ASSOCIATION OF DENVER

[Mr. McCARRAN asked and obtained leave to have printed in the RECORD an address delivered by Hon. James P. McGranery, assistant to the Attorney General, before the Catholic Parent-Teachers Association of Denver, Colo., on March 21, 1946, which appears in the Appendix.]

ADDRESS BY HON. JAMES P. McGRANERY AT GRADUATING EXERCISES OF THE FBI NATIONAL ACADEMY

[Mr. McCARRAN asked and obtained leave to have printed in the RECORD an address delivered by the Honorable James P. McGranery, assistant to the Attorney General, at the graduating exercises of the thirty-first session of the FBI National Academy, on March 29, 1946, which appears in the Appendix.]

ARBITRATION IN CASES AFFECTING RAILWAY EMPLOYEES

[Mr. MEAD asked and obtained leave to have printed in the RECORD an editorial entitled "Arbitration Fumbles," from the Machinist of April 11, 1946; a case filed in the United States District Court, Northern District of Illinois, Eastern Division, Docket No. A-2315, Arbitration 61; a case filed with the National Mediation Board, Docket No. A-2315, Arbitration No. 62; and a statement of Carl J. Goff, assistant president, Brotherhood of Locomotive Firemen and Enginemen, which will appear hereafter in the Appendix.]

THE ST. LAWRENCE SEAWAY—EDITORIAL FROM THE DETROIT NEWS

[Mr. LANGER asked and obtained leave to have printed in the RECORD an editorial relating to the St. Lawrence seaway, published in the Detroit News of April 16, 1946, which appears in the Appendix.]

TWO HUNDREDTH ANNIVERSARY OF THE FOUNDING OF PRINCETON UNIVERSITY

Mr. SMITH. Mr. President, yesterday the Senate passed Senate Joint Resolution 148, to authorize suitable participation by the United States in the observance of the two hundredth anniversary of the founding of Princeton University. Later I learned that the House and passed House Joint Resolution 331, which is an identical measure. The House sent its joint resolution over here and then recessed.

I ask unanimous consent that the vote by which Senate Joint Resolution 148 was passed be reconsidered, and that House

Joint Resolution 331 be presently considered.

The PRESIDENT pro tempore. Without objection, the vote by which Senate Joint Resolution 148 was passed is reconsidered.

Is there objection to the present consideration of House Joint Resolution 331?

There being no objection, the joint resolution (H. J. Res. 331) to authorize suitable participation by the United States in the observance of the two hundredth anniversary of the founding of Princeton University was read twice by its title, considered, ordered to a third reading, read the third time, and passed.

The preamble was agreed to.

The PRESIDENT pro tempore. Without objection, Senate Joint Resolution 148 is indefinitely postponed.

AIRPORT DEVELOPMENT—CONSIDERATION OF CONFERENCE REPORT

Mr. McCARRAN. Mr. President, there was an order made yesterday that the conference report on S. 2 should be taken up today at 12 o'clock. Many Senators who are interested in this matter are absent. So I ask unanimous consent that the conference report may go over, and that it be taken up some day next week.

The PRESIDENT pro tempore. Is there objection?

Mr. WHITE. Mr. President, reserving the right to object, let me say this is a matter in which my colleague [Mr. BREWSTER] is very deeply interested, and I think he had a distinct understanding—I see him approaching, and I now withdraw myself from the floor.

Mr. BREWSTER. Mr. President, if whoever has the floor—

The PRESIDENT pro tempore. The Senator from Nevada has the floor.

Mr. McCARRAN. I wish to make the statement again, in the presence of the Senator from Maine, that on yesterday we agreed that today, the Senator from North Dakota [Mr. LANGER] yielding, we would take up the conference report on Senate bill 2, known as the airport bill. We find, as I was afraid yesterday we would find, that many Senators who are interested in this subject on either side of the aisle are absent. It seems to me, in view of the fact that the matter has been held up for a long time, that it should go over, and, therefore, I am asking unanimous consent that the conference report go over until some day next week when a greater number of Senators can be present. The Senator from Maine has said that on certain days next week he could not be present, and certainly I would not attempt to bring up the conference report on those days.

Mr. BREWSTER. Mr. President, the matter has been pending for a long time, in the initial instance, at the request of the Senator from Nevada, which we were very happy to accord him, as he was to be away for some 2 or 3 weeks. Since he returned, it has been a matter of mutual discussion as to convenience, and it was understood that the conference report would be brought up this week and disposed of, since there might be some concern about the delay. We had a ten-

ATOMIC ENERGY ACT OF 1946

APRIL 19 (legislative day, MARCH 5), 1946.—Ordered to be printed

Mr. McMAHON, from the Special Committee on Atomic Energy,
submitted the following

REPORT

[To accompany S. 1717]

The Special Committee on Atomic Energy, to whom were referred various bills for the control of atomic energy, report back to the Senate S. 1717 with amendment and recommend that the bill do pass. The report submitted herewith outlines in part I the history of the work of the special committee to date, with statements on all other bills and resolutions referred to it and not reported out at this time. Part II consists of an analysis and discussion of each section of S. 1717, giving the reasons behind the various provisions. The appendix to this report contains certain basic information on atomic energy essential to an understanding of the scientific and technical development which forms the background of this legislation.

PART I. HISTORY OF THE LEGISLATION

Within 3 months after atomic bombs were dropped on Hiroshima and Nagasaki, a series of measures was introduced in the Senate to meet the alarming and unprecedented problems created by this revolutionary development of science. Some of the measures sought to establish permanent domestic machinery for the control of atomic energy; some to meet the international problems; others provided simply for studies of the issues involved.

DOMESTIC CONTROL BILLS

On September 6 Senator McMahon introduced S. 1359, establishing an Atomic Energy Control Board composed of five Cabinet officers, the Chairman of the Federal Power Commission, and a public member to serve as Chairman. This bill charged the Board with the responsibility of developing atomic energy domestically and controlling its use. It contained also a provision for sharing information with other

members of the Security Council of the United Nations on a reciprocal basis, subject to the establishment of a system for the international inspection of munitions production.

S. 1463, introduced by Senator Johnson of Colorado on October 3, a bill originating in the War Department, provided for a part-time commission of nine members, with broad controls over the domestic development of atomic energy. Military officials were permitted to serve as members of the Commission or as the full-time administrator or deputy administrator.

S. 1557, introduced on November 6 by Senator Ball, provided for the establishment of a part-time commission of nine members, four of whom would be Cabinet members. Broad authority and general controls similar to those conferred on the managerial boards by S. 1463 and S. 1359 were vested in the Commission.

INTERNATIONAL MEASURES

On October 29, Senator O'Mahoney introduced Senate Concurrent Resolution 38, calling for a universal international agreement to outlaw the atomic bomb. Senator McKellar, on November 8, introduced Senate Resolution 186, which took cognizance of the threat of the atomic bomb and requested that the President enter into international negotiations to outlaw the bomb and to strengthen the United Nations organization. S. 1359, discussed above, contained special provisions to meet the international problem.

SPECIAL STUDIES

On September 6, Senator Vandenberg introduced Senate Concurrent Resolution 28 to establish a joint congressional committee to make a full and complete study of the development, control, and use of atomic energy. This measure passed the Senate but was not acted upon in the House. Senate Joint Resolution 93, introduced September 12, by Senator Thomas of Utah, provided for a commission consisting of Members of Congress, public members, and a Supreme Court Justice. This Commission was to be charged with the duty of formulating immediate policies on atomic energy and recommending legislation to the Congress. Senate Resolution 179, introduced on October 29, by Senator McMahon, proposed the establishment of a Senate Special Committee on Atomic Energy to—

make a full, complete, and continuing study and investigation with respect to problems relating to the development, use, and control of atomic energy.

The committee was to report on bills and resolutions relating to atomic energy referred to it from the Senate and to make recommendations as to legislation.

PRESIDENTIAL MESSAGE, OCTOBER 3, 1945

On October 3, 1945, the President sent a message to the Congress stressing the necessity of legislation. This message emphasized the need for a national policy for the control of atomic energy to assure its use for peaceful ends and for the safety of the Nation.

The President outlined provisions to be included in the legislation as follows:

1. An atomic energy commission whose members should be appointed by the President, with the advice and consent of the Senate.

2. Control by the Commission over all atomic energy installations, with authority to acquire source materials, i. e., uranium ores, and other property needed in the development of atomic energy.

3. Encouragement by the Commission of research, development, and exploitation in the field of atomic energy, with the power to license property and facilities for these purposes.

4. A prohibition on the export or import of source materials except under the direction of the Commission.

5. Security regulations and penalties for their violation to be prescribed by the Commission.

The President also advocated international agreements renouncing the use of the atomic bomb but encouraging the development of atomic energy for peacetime purposes. The basic scientific knowledge on atomic energy, the message said, is already widely disseminated. An armament race could end only in disaster. Discussions with Great Britain and Canada were proposed by the President as a forerunner to adequate international control under the auspices of the United Nations.

CREATION OF SPECIAL SENATE COMMITTEE ON ATOMIC ENERGY

On October 29, 1945, the Senate adopted Senate Resolution 179, establishing the Special Committee on Atomic Energy. The text of the resolution is as follows:

Resolved, That a special committee on atomic energy, to be composed of eleven Members of the Senate appointed by the President pro tempore of the Senate, of whom one shall be designated as chairman by the President pro tempore, is authorized and directed to make a full, complete, and continuing study and investigation with respect to problems relating to the development, use, and control of atomic energy. All bills and resolutions introduced in the Senate, and all bills and resolutions from the House of Representatives, proposing legislation relating to the development, use, and control of atomic energy shall be referred to the special committee. The special committee is authorized to report to the Senate at the earliest practicable date by bill or otherwise with recommendations upon any matters covered by this resolution. The existence of this committee shall terminate at the end of the Seventy-ninth Congress.

For the purposes of this resolution the committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such times and places during the sessions, recesses, and adjourned periods of the Senate in the Seventy-ninth Congress, to employ such experts, and such clerical, stenographic, and other assistants, to require by subpoena or otherwise the attendance of such witnesses and the production of such correspondence, books, papers, and documents, to administer such oaths, to take such testimony, and to make such expenditures, as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words. The expenses of the committee, which shall not exceed \$25,000, shall be paid from the contingent fund of the Senate upon vouchers approved by the chairman.

GENERAL HEARINGS

At its first meeting the committee determined to begin its work, not with a consideration of specific legislation but with public hearings of a general nature, in which the scientific background and the essential technical facts of atomic energy might be made known to the committee and to the public.

In particular, the committee wanted information which would help to answer these questions:

1. What had been the real effects of the atomic bombs dropped on Hiroshima and Nagasaki? What were the destructive potentialities of atomic bombs, at present and in the foreseeable future?

2. How difficult had it been to make the atomic bomb? How easy would it be for other countries to make it?

3. What defense could be devised against the atomic bomb?

4. What secrets did this country hold in connection with the production of atomic bombs? Could these secrets be kept, and if so, how long?

5. What peacetime benefits would come from atomic energy?

6. How was the Manhattan district project run? How had it originated? Who had contributed to it? How could it best be operated in the future?

To answer these questions the committee called a large number of witnesses. Since most of the questions were of technical nature, many of the witnesses were scientists who had worked on the atomic bomb. Whenever possible, witnesses were heard in public sessions; but where testimony subject to security considerations was required, it was given in executive session. The most painstaking precautions were taken to assure the maintenance of secrecy with respect to testimony given in executive sessions.

In addition to the scientists, military officials, industrialists, and others who had been closely connected with the Manhattan district project were heard. The complete list of witnesses is as follows:

Witnesses appearing before the committee, Nov. 27-Dec. 20, 1945

Name	Title	Date
Dr. Alexander Sachs.....	Economist.....	Nov. 27
Maj. Gen. L. R. Groves, U. S. Army...	Director, Manhattan Engineering District.....	Nov. 28
		Nov. 29
Dr. Harold C. Urey.....	Professor of chemistry, University of Chicago.....	Do.
Dr. Irving Langmuir.....	Associate director of the research laboratory, General Electric Co.	Nov. 30
Dr. Vannevar Bush.....	Director, Office of Scientific Research and Development.	Dec. 3
Dr. J. R. Oppenheimer.....	Professor of physics, California Institute of Technology.	Dec. 5
Dr. Hans A. Bethe.....	Professor of physics, Cornell University.....	Do.
Dr. Philip Morrison.....	Physicist, Los Alamos Laboratory.....	Dec. 6
Dr. S. A. Goudsmit.....	Professor of physics, University of Michigan.....	Do.
Dr. Leo Szilard.....	Staff member, Metallurgical laboratory, University of Chicago.	Dec. 10
Dr. John A. Simpson.....	Physicist, University of Chicago.....	Dec. 12
Dr. Clarke Williams.....	Physicist, College of the City of New York.....	Do.
Dr. Alvin M. Weinberg.....	Physicist, Clinton Laboratories, Oak Ridge.....	Do.
Dr. Ross Gunn.....	Naval Research Laboratory.....	Dec. 13
Commodore W. S. Parsons.....	Assistant to the Deputy Chief, Naval Operations for Special Weapons.	Do.
Vice Adm. W. H. P. Blandy.....	Deputy Chief, Naval Operations for Special Weapons.	Dec. 14
Rear Adm. William R. Funnell.....	Assistant Chief of Naval Operations for Mat riel.....	Do.
Rear Adm. Lewis L. Strauss.....	Deputy Chairman of the Army-Navy Munitions Board and special assistant to the Secretary of the Navy.	Do.
Frank R. Creedon.....	Formerly with Stone & Webster Engineering Corp.....	Dec. 19
H. E. Thompson.....	Vice president, Carbide & Carbon Chemicals Corp.....	Do.
H. A. Winne.....	Vice president, General Electric Co.....	Dec. 20
Edwin H. Brown.....	Vice president, Allis-Chalmers Manufacturing Co.....	Do.

The information developed at the hearings went far toward answering questions which the committee had set. The public hearings have been printed and merit the careful attention of anyone with a serious interest in the atomic energy problems before the Congress. What follows is a terse summary of the main lines of the testimony:

1. The atomic bomb is a weapon of appalling destructiveness. While quantitative comparisons with other explosives can be made, the arithmetical ratios describe inadequately the profound changes in all relations between nations foreshadowed by the existence of the atomic bomb. The bomb and the improvements on it, which will certainly be made, mean that another war in which atomic bombs are used will threaten the existence not only of cities and nations, but of civilization itself.

2. Other countries of the world will be able to make atomic bombs. The monopoly which we hold at present is precarious and certain to be short-lived. Estimates differ as to when this or that country will be able to produce atomic bombs, but it is clear that any nation which is relatively industrialized has a good chance of producing bombs within the next 5 to 15 years. The degree of industrialization will determine how soon bombs can be made in quantity rather than the possibility of mastering the art of making an atomic bomb.

3. No real military defense against the atomic bomb has been devised, and none is in sight. The destructiveness of atomic bombs is so engulfing that any defense which is not almost literally airtight will not protect our country against devastation.

bomb. Whenever possible, witnesses were heard in public sessions;

4. Some protection may accrue from the faithful adherence to international agreements for the prevention of atomic bomb manufacture. Such agreements raise technical problems of inspection and control which are inordinately difficult but not beyond solution. The political problems depend for their solution on widespread good faith and the will to peace among all nations. Thus, it turns out that the real protection against the atomic bomb lies in the prevention of war.

5. The secrets which we hold are matters of science and engineering that other nations can and will discover. In large part they are secrets of nature, and the book of nature is open to careful, painstaking readers the world over. We can give ourselves a certain temporary protection by retaining the secrets we now have. But that protection grows weaker day by day, and our research must be vigorously encouraged, supported, and pursued if we are to maintain our place among other nations, to say nothing of retaining our advantage.

6. The peacetime benefits of atomic energy promise to be great indeed, particularly in medicine, biology, and many branches of research. These benefits are immediate in their promise but will require extended and unfettered development for full realization. The vast possibilities of utilizing atomic energy as a source of power depend on (1) further research and development, and (2) study of the economic and international implications of the establishment of plants producing and using fissionable material. In this connection, the point has been repeatedly emphasized that plants which produce

power also produce material which constitutes the explosive element of bombs. This fact raises domestic and international issues of profound significance.

7. Military control of atomic energy development, though necessary and useful during the war, is a form of direction to which scientists in peacetime will not willingly submit. The continuation of such control will probably discourage further development and research. And on that development depends not only peaceful progress, but the maintenance of a position in the military arts essential to the national defense. On the other hand, the armed services are entitled to extensive participation in this development, insofar as it relates to the military applications of atomic energy. It is their right also to have a voice in protecting the military secrets of atomic weapons.

On the basis of these data the outlines of legislation to deal with atomic energy began to emerge. At the conclusion of the first group of hearings it seemed evident that certain facts relating to atomic energy, including all technical data on the design and construction of the atomic bomb itself, ought to be kept secret, at least until effective and reciprocal international safeguards could be devised. This was the principle enunciated in the joint declaration of President Truman, Prime Minister Attlee, and Prime Minister Mackenzie King on November 15, 1945. At the same time, it was realized that the keeping of these secrets was only a temporary thing. Legislation should facilitate as far as possible (1) international agreements on atomic energy which would themselves be a step toward international understanding and good will, and (2) the rapid scientific development of atomic energy, which would promote both the industrial prosperity of the world and the improvement of our own instruments of national defense.

Specifically, the testimony heard before the Christmas recess suggested answers to the main problems which had been raised by the three bills introduced before the hearings were begun. It suggested that the development of atomic energy, which was of paramount importance, could best be done by a full-time civilian commission. This Commission would require broad powers to stimulate private research and development and should be able actively to promote military as well as industrial and scientific research. The Commission should be required to own all materials from which an atomic bomb might be made and to operate all plants where these materials were manufactured. Legislation should make adequate provision for the protection of information of direct military value to a foreign power and for the role of the armed services in relation to military applications of atomic energy. However, since the only real solution to the whole problem lies in continued world peace, legislation should be directed in specific terms toward that end and should contain a practical expression of our desire for international cooperation.

INTRODUCTION OF S. 1717

S. 1717 was introduced in the Senate on December 20 by Senator McMahon. As originally introduced it contained many provisions reflecting the principles developed at the committee's hearings. It provided for a full-time civilian commission, and charged the Com-

mission with the responsibility of owning all fissionable materials and operating all facilities for their production. It gave certain guaranties to free scientific research, made provision for licensing devices utilizing atomic energy, and contained supporting provisions relating to source materials, patents, bombs, and other matters.

LETTER FROM THE PRESIDENT

On February 1, 1946, the President in a letter addressed to the chairman indicated five points which he considered desirable in atomic energy legislation. These points were:

1. A commission of three full-time civilian members.
2. Exclusive production and ownership by the Government of the materials releasing atomic energy (fissionable material).
3. Compulsory, nonexclusive licensing of private patents on devices utilizing atomic energy.
4. Guaranties to free scientific research.
5. Provisions to facilitate the establishment and enforcement of international agreements.

HEARINGS ON DOMESTIC LEGISLATION

Every phase of atomic energy legislation was discussed in the hearings after the Christmas recess.

Witnesses were invited to give their views on the composition of the Commission—whether it should be full-time or part-time, whether there should be military representation, whether it was probable that men of the highest caliber would be available for service with the Commission.

Industrialists and engineers who had participated in the operations of the Manhattan district project gave the committee their judgment on such points as Government versus private ownership and operation of plants producing fissionable materials, ownership and custody of fissionable materials, organizational structure to assure maximum operating efficiency, etc. Experts testified on suitable methods of controlling source materials for the production of fissionable materials, on effective means of developing and controlling atomic energy power plants and other devices utilizing this energy. Testimony was offered by eminent counsel on framing patent procedures so as to assure the maintenance of security, the preservation of incentive, the vigorous and fruitful development of atomic energy in all its phases.

The committee heard Cabinet members, the Director of the Bureau of the Budget and other qualified Government officials on numerous aspects of the bill, especially administrative issues. Testimony was offered on methods of controlling the dissemination of information. Questions relating to the general authority and broad powers of the Commission were considered. The views of the Military Departments were solicited on problems relating to liaison and the military applications of atomic energy.

A complete list of the witnesses who testified at these hearings is as follows:

Witnesses appearing before the committee, Jan. 22-Apr. 8, 1946

Name	Title	Date
Harold D. Smith.....	Director, Bureau of the Budget.....	Jan. 22
William H. Davis.....	Former Director of the Office of Economic Stabilization and former Chairman of the War Labor Board.....	Do.
Hon. James Forrestal.....	Secretary of the Navy.....	Jan. 23
Vice Adm. W. H. P. Blandy.....	Deputy Chief of Naval Operations for Special Weapons.....	{ Do. Jan. 24
Hon. Harold L. Ickes.....	Secretary of the Interior.....	Jan. 23
Dr. Robert M. Hutchins.....	Chancellor of the University of Chicago.....	Jan. 25
Dr. Robert Redfield.....	Dean, social sciences division, University of Chicago.....	Do.
Dr. Reuben G. Gustavson.....	Vice president, University of Chicago.....	Do.
Edward H. Levi.....	Professor, University of Chicago Law School.....	Do.
Dr. Harrison Davies.....	Physicist, Clinton Laboratories, Oak Ridge.....	Jan. 28
Dr. Harlow Shapley.....	Director of Harvard Observatory.....	Jan. 29
Dr. Isidor I. Rabi.....	Professor of physics, Columbia University.....	Do.
Watson Davis.....	Director, Science Service.....	Jan. 30
Raymond Swing.....	Radio news commentator.....	Jan. 30
Dr. John von Neumann.....	Professor of mathematical physics, Institute for Advanced Study, Princeton, N. J.....	Jan. 31
Hon. Henry A. Wallace.....	Secretary of Commerce.....	Do.
Dr. Karl T. Compton.....	President, Massachusetts Institute of Technology.....	Feb. 1
Edward Teller.....	Professor of physics, University of Chicago.....	Do.
J. A. Rafferty.....	Vice president, Union Carbide & Carbon Corp.....	Feb. 7
George E. Folk.....	Patent adviser to the National Association of Manufactur- ers.....	Feb. 8
Edwin D. Bransome.....	President, Vanadium Corp. of America.....	Do.
Frederick F. Kett.....	General manager, mining division, Vanadium Corp. of America.....	Do.
Irvin Stewart.....	Deputy Director, Office of Scientific Research and Develop- ment.....	Feb. 11
John T. Connor.....	Former general counsel, Office of Scientific Research and Development.....	Do.
Capt. Robert A. Lavender, U. S. Navy (retired).....		Do.
Commander Roland A. Anderson, U. S. Naval Reserve.....		Do.
August C. Klein.....	Engineering manager, Stone & Webster Engineering Corp.....	Feb. 13
J. R. Lotz.....	Chairman, board of directors, Stone & Webster Engineer- ing Corp.....	Do.
Basil Manly.....	Vice president and director, Southern Natural Gas Co., and former Chairman of the Federal Power Commission.....	Do.
Hon. Robert P. Patterson.....	Secretary of War.....	Feb. 14
Frank B. Jewett.....	President, National Academy of Sciences.....	Do.
Maj. Alexander P. de Seversky.....	Former consultant to the Secretary of War.....	Feb. 15
Gen. Thomas F. Farrell.....	State engineer, Public Works Department, Albany, N. Y.; former deputy to Major General Groves.....	Do.
Col. Stafford Warren.....	Chief, medical section of Manhattan engineering district.....	Do.
Paul H. Nitze.....	Vice Chairman, U. S. Strategic Bombing Survey.....	Feb. 15
Prof. H. L. Bowman.....	United States Strategic Bombing Survey.....	Do.
Dr. Luther L. Terry.....		Do.
Dr. Philip Morrison.....	Physicist, Los Alamos Laboratory.....	Do.
Dr. Louis N. Ridenour.....	Physicist, radiation laboratories, M. I. T.....	Do.
Mrs. Harold A. Stone.....	Director, National League of Women Voters.....	Feb. 18
Mrs. Allan C. G. Mitchell.....		Do.
Mr. John C. Parker.....	Representing the Association of Edison Illuminating Cos.....	Do.
Dr. Ralph McDonald.....	Representing the National Education Association of the United States.....	Feb. 19
Mrs. Harper Sibley.....	President, United Council of Church Women.....	Do.
Commander Stephen Brunauer, U. S. Naval Reserve.....		Do.
Maj. Gen. L. R. Groves, U. S. Army.....	Director, Manhattan engineering district.....	Feb. 27,
Lindsay Warren.....	Comptroller General of the United States.....	Apr. 8
Frank L. Yates.....	Assistant Comptroller General of the United States.....	Apr. 4,
Edwin L. Fisher.....	Acting general counsel, General Accounting Office.....	Apr. 8
		Do.
		Do.

Finally, after 4 weeks of hearings, the committee went into executive session to consider the legislation itself. The bill introduced by the chairman, S. 1717, was quickly adopted as a working basis. The committee went over this bill word by word, altering, adding, and striking out various portions. Drawing heavily on the information

and advice developed during both sets of hearings, the committee members considered also the issues raised in public debate. At one point the public hearings were reopened to hear several witnesses on certain specific provisions of the bill. Aware of the unique role scientists had played throughout and recognizing the value of their counsel, the committee incorporated in the bill certain additions and changes recommended by leading scientific groups.

The bill was under discussion in executive session for several weeks of daily sessions, all initial differences of opinion on major elements were satisfactorily resolved, and no section was adopted except by unanimous consent. Thus the bill, as amended, in its entirety has the unanimous approval of the committee. It reflects the deliberate judgment of all the committee members as to the best instrument they are able to devise in the discharge of their grave responsibility.

PART II. ANALYSIS OF S. 1717 BY SECTIONS

Section 1. Declaration of policy

(a) FINDINGS AND DECLARATION.—Research and experimentation in the field of nuclear chain reaction have attained the stage at which the release of atomic energy on a large scale is practical. The significance of the atomic bomb for military purposes is evident. The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved. Therefore, any legislation will necessarily be subject to revision from time to time. It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life. Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

(b) PURPOSE OF ACT.—It is the purpose of this Act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the field; and

(5) A program of administration which will be consistent with the foregoing policies and with international arrangements made by the United States, and which will enable the Congress to be currently informed so as to take further legislative action as may hereafter be appropriate.

Subject to the paramount objective of assuring the national defense and security, it is the purpose of the bill to direct the development of atomic energy in such a way as to improve the public welfare, increase the standard of living, strengthen free competition in private enterprise, and promote world peace. To carry out these purposes, the bill provides for Government control over atomic energy and for Government programs of information, production, research, and development. It provides a program of administration to exercise this control and carry out this development, subject to international agreements of the

United States and to such further legislation as the Congress may enact. It is recognized that many unforeseeable developments may arise in this field requiring changes in the legislation from time to time.

Section 2. Organization

(a) ATOMIC ENERGY COMMISSION.—

(1) There is hereby established an Atomic Energy Commission (herein called the Commission), which shall be composed of five members. Three members shall constitute a quorum of the Commission. The President shall designate one member as Chairman of the Commission.

(2) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate. In submitting any nomination to the Senate, the President shall set forth the experience and the qualifications of the nominee. The term of office of each member of the Commission taking office prior to the expiration of two years after the date of enactment of this Act shall expire upon the expiration of such two years. The term of office of each member of the Commission taking office after the expiration of two years from the date of enactment of this Act shall be five years, except that (A) the terms of office of the members first taking office after the expiration of two years from the date of enactment of this Act shall expire, as designated by the President at the time of appointment, one at the end of three years, one at the end of four years, one at the end of five years, one at the end of six years, and one at the end of seven years, after the date of enactment of this Act; and (B) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term. Any member of the Commission may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. Each member, except the Chairman, shall receive compensation at the rate of \$15,000 per annum; and the Chairman shall receive compensation at the rate of \$17,500 per annum. No member of the Commission shall engage in any other business, vocation, or employment than that of serving as a member of the Commission.

(3) The principal office of the Commission shall be in the District of Columbia, but the Commission or any duly authorized representative may exercise any or all of its powers in any place. The Commission shall hold such meetings, conduct such hearings, and receive such reports as may be necessary to enable it to carry out the provisions of this Act.

(4) There are hereby established within the Commission—

(A) a General Manager, who shall discharge such of the administrative and executive functions of the Commission as the Commission may direct. The General Manager shall be appointed by the President by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$15,000 per annum. The Commission may make recommendations to the President with respect to the appointment or removal of the General Manager.

(B) a Division of Research, a Division of Production, a Division of Engineering, and a Division of Military Application. Each division shall be under the direction of a Director who shall be appointed by the Commission, and shall receive compensation at the rate of \$14,000 per annum. The Commission shall require each such division to exercise such of the Commission's powers under this Act as the Commission may determine, except that the authority granted under section 3 (a) of this Act shall not be exercised by the Division of Research.

(b) *GENERAL ADVISORY COMMITTEE.*—There shall be a General Advisory Committee to advise the Commission on scientific and technical matters relating to materials, production, and research and development, to be composed of nine members, who shall be appointed from civilian life by the President. Each member shall hold office for a term of six years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term; and (2) the terms of office of the members first taking office after the date of the enactment of this Act shall expire, as designated by the President at the time of appointment, three at the end of two years, three at the end of four years, and three at the end of six years, after the date of the enactment of this Act. The Committee shall designate one of its own members as Chairman. The Committee shall meet at least four times in every calendar year. The members of the Committee shall receive a per diem compensation of \$50 for each day spent in meetings or conferences, and all members shall receive their necessary traveling or other expenses while engaged in the work of the Committee.

(e) **MILITARY LIAISON COMMITTEE.**—There shall be a Military Liaison Committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine. The Commission shall advise and consult with the Committee on all atomic energy matters which the Committee deems to relate to military applications, including the development, manufacture, use, and storage of bombs, the allocation of fissionable material for military research, and the control of information relating to the manufacture or utilization of atomic weapons. The Commission shall keep the Committee fully informed of all such matters before it and the Committee shall keep the Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the Committee at any time concludes that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the Departments of War or Navy, derived from the Constitution, laws, and treaties, the Committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy. If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

(a) *Atomic Energy Commission.*—The Atomic Energy Commission is the principal administrative body established in the bill. As such, it is responsible for administering domestic controls over atomic energy, for carrying on production, research, and development programs, and for stimulating and supporting private research and development. The Commission is composed of five full-time civilian members, appointed by the President and confirmed by the Senate.

The provision for full-time Commissioners was urged by many witnesses at the committee hearings, especially by experts in Government administration. These witnesses emphasized the grave responsibility for national security and welfare devolving upon the Commissioners, the need for continuous study of changing technical developments, and the many innovations in administrative techniques that will be involved. While the Commissioners need not be scientists or technical experts, they must combine clear judgment with imagination and courage, and they must, like the members of the judiciary, be so divorced from private and competing concerns as to give complete, disinterested, and undivided attention to their tasks. A salary of \$17,500 per annum for the Chairman and \$15,000 for the other Commissioners has been set to indicate that the duties and responsibilities of these positions are comparable to those on the highest level of Government administration.

The decision to limit membership eligibility to civilians was adopted by the committee in keeping with established traditions of our Government. It accords with principles cherished and maintained throughout American history. Departure from these principles has occasioned judicial, executive, and legislative disapproval. This is not to say that the committee fails to recognize legitimate and important areas of atomic energy development and control touching on the responsibilities of the military departments. Indeed, throughout the bill, wherever these areas are involved, provision is made for full military participation, and independent activities of the military departments, especially in research and development, are not infringed but expressly encouraged.

The tenure of the Commissioners is such that eventually they will serve for 5-year terms, with one member appointed each year. Initially, it seems advisable to allow for a complete reappointment of

Commissioners after the act has been in force for 2 years and the President has had the opportunity of reviewing their work. Reappointments are then staggered to avoid disruption of the Commission's activities.

The organization subordinate to the Commission consists of a General Manager appointed by the President with the advice and consent of the Senate, and four Division heads, appointed by the Commission. The divisions specified are: Division of Research, Division of Production, Division of Engineering, and Division of Military Applications. This form of organization is based on administrative experience developed in both Government and industry. Such experience points to the need for a high-level policy group which can discharge its functions without the additional burden of passing on current operations. Day-to-day administration is best directed by a single manager. While the scope and importance of his duties are such as to require his appointment directly by the President, the manager is to work under the general supervision and direction of the Commission, "to discharge such of the administrative and executive functions of the Commission as the Commission may direct."

(b) *General Advisory Committee*.—A board of civilian advisers is to be appointed by the President to meet at least four times a year and consult with the Commission on scientific and technical matters relating to materials, production, research, and development. The committee's intention in adopting this device is to enlarge the panel of talent and experience on which the Commission can draw in performing its varied and complex duties.

(c) *Military Liaison Committee*.—A Military Liaison Committee appointed by the Secretaries of War and Navy is to consult with the Commission on all activities relating to the military applications of atomic energy. This provision has been adopted to give the armed forces a proper voice in such matters as development, manufacture, storage, and use of bombs; allocations of fissionable materials for military research; control of information relating to the manufacture and use of atomic weapons. Upon receiving the recommendations of the Military Liaison Committee, the Secretaries of War and Navy may at their own discretion carry to the President a protest against any of the Commission's actions or failures to act in reference to the matters described. In such event, final decisions as to the course of action of the Commission relating to matters for which the War and Navy Departments have responsibility are made by the President.

Section 3. Research

(a) *RESEARCH ASSISTANCE*.—The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development activities in the fields specified below by private or public institutions or persons and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields. To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, grants-in-aid and loans) for the conduct of research and development activities relating to—

- (1) nuclear processes;
- (2) the theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) utilization of fissionable and radioactive materials for medical, biological, health, or military purposes;

(4) utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and

(5) the protection of health during research and production activities.

The Commission may make such arrangements without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and may make partial and advance payments under such arrangements, and may make available for use in connection therewith such of its equipment and facilities as it may deem desirable. Such arrangements shall contain such provisions to protect health, to minimize danger from explosion and other hazards to life or property, and to require the reporting and to permit the inspection of work performed thereunder, as the Commission may determine; but shall not contain any provisions or conditions which prevent the dissemination of scientific or technical information, except to the extent such dissemination is prohibited by law.

(b) RESEARCH BY THE COMMISSION.—The Commission is authorized and directed to conduct, through its own facilities, activities and studies of the types specified in subsection (a) above.

The committee recognizes that only by continued progress in science can the purpose of the bill be achieved. It is firm in its opinion that continued progress will depend, in the future as in the past, upon the free and disinterested work of the thousands of scientists and research workers in private laboratories and universities throughout our country and the world. Science is not made by its titans alone.

In drafting the bill the committee has been particularly careful to refrain from inserting prohibitions or restrictions of any nature on scientific research. The committee confines the powers of the Commission over independent research to the minimum necessary to protect national security and to prevent hazards to the public safety and health. The Commission is directed to assist private and public institutions in the acquisition of an ever-expanding fund of theoretical and practical knowledge in the following fields:

(1) nuclear processes; (2) the theory and production of atomic energy, including processes, materials, and devices related to such production; (3) utilization of fissionable and radioactive materials for medical, biological, health, or military purposes; (4) utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and (5) the protection of health during research and production activities.

The means of assistance provided in the bill are varied and extensive. The Commission is to make arrangements (including contracts, loans, grants-in-aid) with private or public institutions or persons and may place equipment and facilities at their disposal. Under section 5 the Commission is directed "to distribute sufficient fissionable material to permit the conduct of widespread research and development activity, to the maximum extent practicable," and is directed in the distribution of byproduct material to "give preference to applicants proposing to use such materials in the conduct of research and development activity."

The Commission is also directed to carry on, supplementary to these aids to private and public institutions, its own program of research, in the fields specified above through its facilities and under its supervision.

Section 4. Production of fissionable material

(a) **DEFINITION.**—As used in this Act, the term “produce,” when used in relation to fissionable material, means to manufacture, produce, or refine fissionable material, as distinguished from source materials as defined in section 5 (b) (1), or to separate fissionable material from other substances in which such material may be contained or to produce new fissionable material.

(b) **PROHIBITION.**—It shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

(c) **OWNERSHIP AND OPERATION OF PRODUCTION FACILITIES.**—

(1) **OWNERSHIP OF PRODUCTION FACILITIES.**—The Commission shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (A) are useful in the conduct of research and development activities in the fields specified in section 3, and (B) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

(2) **OPERATION OF THE COMMISSION'S PRODUCTION FACILITIES.**—The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) **OPERATION OF OTHER PRODUCTION FACILITIES.**—Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) **IRRADIATION OF MATERIALS.**—For the purpose of increasing the supply of radioactive materials, the Commission is authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

From the start of its deliberations, the committee has been convinced that an absolute Government monopoly of production of fissionable materials is indispensable to effective domestic control of atomic energy. A number of factors point unmistakably in this direction:

1. Fissionable material is the principal ingredient of the atomic bomb. Thus, to permit private manufacture of fissionable material would be to permit private manufacture of material of enormous destructive potentialities.

2. The production of fissionable material is attended by serious hazards to public health and safety. The responsibility for minimizing these hazards is clearly a governmental function.

3. The future production of fissionable material is closely inter-related with the possibility of achieving effective and reciprocal international safeguards against the use of atomic weapons. It is undesirable, therefore, to permit private development in an area which may soon be placed under Government control by reason of international agreements.

4. The production of fissionable material is technologically in its infancy; unforeseen and unforeseeable factors may play a great part in its development. To permit decontrol and decentralization of this activity, and weaken continuing Government supervision, would be contrary to the principle of prudent stewardship demanded of the Government by considerations of national defense and national welfare.

5. The technology of fissionable material production teaches that even a slight interruption in the manufacturing process may occasion great loss and damage to the entire operation. Government control is more likely to assure continuity of operation than is private control.

Wherever possible, the committee endeavors to reconcile Government monopoly of the production of fissionable material with our traditional free-enterprise system. Thus, the bill permits management contracts for the operation of Government-owned plants so as to gain the full advantage of the skill and experience of American industry. Industrial research in the field of atomic energy is left to private initiative, even where it relates to methods of production. Prospecting for and mining of source materials are at every stage to be encouraged and supported.

Section 5. Control of materials

(a) FISSIONABLE MATERIALS.—

(1) DEFINITION.—As used in this Act, the term "fissionable material" means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material, or any material artificially enriched by any of the foregoing; but does not include source materials, as defined in section 5 (b) (1).

(2) GOVERNMENT OWNERSHIP OF ALL FISSIONABLE MATERIAL.—All right, title, and interest within or under the jurisdiction of the United States, in or to any fissionable material, now or hereafter produced, shall be the property of the Commission, and shall be deemed to be vested in the Commission by virtue of this Act. Any person owning any interest in any fissionable material at the time of the enactment of this Act, or owning any interest in any material at the time when such material is hereafter determined to be a fissionable material, or who lawfully produces any fissionable material incident to privately financed research or development activities, shall be paid just compensation therefor. The Commission may, by action consistent with the provisions of paragraph (4) below, authorize any such person to retain possession of such fissionable material, but no person shall have any title in or to any fissionable material.

(3) PROHIBITION.—It shall be unlawful for any person, after sixty days from the effective date of this Act to (A) possess or transfer any fissionable material, except as authorized by the Commission, or (B) export from or import into the United States any fissionable material, or (C) directly or indirectly engage in the production of any fissionable material outside of the United States.

(4) DISTRIBUTION OF FISSIONABLE MATERIAL.—Without prejudice to its continued ownership thereof, the Commission is authorized to distribute fissionable material, with or without charge, to applicants requesting such material (A) for the conduct of research or development activities either independently or under contract or other arrangement with the Commission, (B) for use in medical therapy, or (C) for use pursuant to a license issued under the authority of section 7. Such material shall be distributed in such quantities and on such terms that no applicant will be enabled to obtain an amount sufficient to construct a bomb

or other military weapon. The Commission is directed to distribute sufficient fissionable material to permit the conduct of widespread independent research and development activity, to the maximum extent practicable. In determining the quantities of fissionable material to be distributed, the Commission shall make such provisions for its own needs and for the conservation of fissionable material as it may determine to be necessary in the national interest for the future development of atomic energy. The Commission shall not distribute any material to any applicant, and shall recall any distributed material from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as may be established by the Commission, or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(5) The Commission is authorized to purchase or otherwise acquire any fissionable material or any interest therein outside the United States, or any interest in facilities for the production of fissionable material, or in real property on which such facilities are located, without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under contracts for such purposes. The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

(b) SOURCE MATERIALS.—

(1) DEFINITION.—As used in this Act, the term "source material" means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

(2) LICENSE FOR TRANSFERS REQUIRED.—Unless authorized by a license issued by the Commission, no person may transfer or deliver and no person may receive possession of or title to any source material after removal from its place of deposit in nature, except that licenses shall not be required for quantities of source materials which, in the opinion of the Commission, are unimportant.

(3) ISSUANCE OF LICENSES.—The Commission shall establish such standards for the issuance, refusal, or revocation of licenses as it may deem necessary to assure adequate source materials for production, research, or development activities pursuant to this Act or to prevent the use of such materials in a manner inconsistent with the national welfare. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish.

(4) REPORTING.—The Commission is authorized to issue such regulations or orders requiring reports of ownership, possession, extraction, refining, shipment, or other handling of source materials as it may deem necessary, except that such reports shall not be required with respect to (A) any source material prior to removal from its place of deposit in nature, or (B) quantities of source materials which in the opinion of the Commission are unimportant or the reporting of which will discourage independent prospecting for new deposits.

(5) ACQUISITION.—The Commission is authorized and directed to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this Act. Any purchase made under this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made thereunder. The Commission may establish guaranteed prices for all source materials delivered to it within a specified time. Just compensation shall be made for any property taken, requisitioned, or condemned under this paragraph.

(6) EXPLORATION.—The Commission is authorized to conduct and enter into contracts for the conduct of exploratory operations, investigations, and inspections to determine the location, extent, mode of occurrence, use, or conditions of deposits or supplies of source materials, making just compensation for any damage or injury occasioned thereby. Such exploratory operations may be conducted only with the consent of the owner, but such investigations and inspections may be conducted with or without such consent.

(7) **PUBLIC LANDS.**—All uranium, thorium, and all other materials determined pursuant to paragraph (1) of this subsection to be peculiarly essential to the production of fissionable material, contained, in whatever concentration, in deposits in the public lands are hereby reserved for the use of the United States; except that with respect to any location, entry, or settlement made prior to the date of enactment of this Act no reservation shall be deemed to have been made, if such reservation would deprive any person of any existing or inchoate rights or privileges to which he would otherwise be entitled or would otherwise enjoy. The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources, under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby. Any lands so patented, conveyed, leased, or otherwise disposed of may be used, and any rights under any such permit or authorization may be exercised, as if no reservation of such materials had been made under this subsection; except that, when such use results in the extraction of any such material from the land in quantities which may not be transferred or delivered without a license under this subsection, such material shall be the property of the Commission and the Commission may require delivery of such material to it by any possessor thereof after such material has been separated as such from the ores in which it was contained. If the Commission requires the delivery of such material to it, it shall pay to the person mining or extracting the same, or to such other person as the Commission determines to be entitled thereto, such sums, including profits, as the Commission deems fair and reasonable for the discovery, mining, development, production, extraction, and other services performed with respect to such material prior to such delivery, but such payment shall not include any amount on account of the value of such material before removal from its place of deposit in nature. If the Commission does not require delivery of such material to it, the reservation made pursuant to this paragraph shall be of no further force or effect.

(c) **BYPRODUCT MATERIALS.**—

(1) **DEFINITION.**—As used in this Act, the term "byproduct material" means any radioactive material (except fissionable material) yielded in or made radioactive by exposure to the radiation incident to the processes of producing or utilizing fissionable material.

(2) **DISTRIBUTION.**—The Commission is authorized to distribute, with or without charge, byproduct materials to applicants seeking such materials for research or development activity, medical therapy, industrial uses, or such other useful applications as may be developed. In distributing such materials, the Commission shall give preference to applicants proposing to use such materials in the conduct of research and development activity or medical therapy. The Commission shall not distribute any byproduct materials to any applicant, and shall recall any distributed materials from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such materials in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(d) **GENERAL PROVISIONS.**—

(1) The Commission shall not distribute any fissionable or source material to any person for a use which is not under or within the jurisdiction of the United States or to any foreign government.

(2) The Commission shall establish by regulation a procedure by which any person who is dissatisfied with the distribution or refusal to distribute to him, or the recall from him, of any fissionable or byproduct materials or with the issuance, refusal, or revocation of a license to him for the transfer or receipt of source materials may obtain a review of such determination by a board of appeal consisting of three members appointed by the Commission. The Commission may in its discretion review and revise any decision of such board of appeal.

1. *Fissionable materials.*—Fissionable materials are those capable of releasing substantial quantities of energy through nuclear chain reaction. Included are U-235 and plutonium; the Commission may, by regulation, add other materials to this class. Consistent with sec.

tion 4, which provides for Government ownership of all production facilities and a Government monopoly of production, the ownership of all fissionable material is vested in the Commission and private ownership is forbidden. The bill provides, of course, that just compensation shall be made to private owners.

While title is vested in the Commission, it is authorized to distribute fissionable material, with or without charge, for conducting research and development activities, for use in medical therapy, or for use in devices utilizing atomic energy, pursuant to licenses under section 7. The Commission is authorized to purchase or acquire fissionable material outside the United States but the export of fissionable material is prohibited.

Since fissionable material is produced incident to research and development, appropriate provision is made in the bill to permit the conduct of such activities subject to the maintenance of security, and health and safety standards.

2. *Source materials*.—A source material is any material determined by the Commission to be peculiarly essential to the production of fissionable material. The relation of source material to nuclear energy may be thus portrayed:

Source material plus processing	—————→	Fissionable material.
Fissionable material plus processing	—————→	Atomic (i. e., nuclear) energy.

Source materials include uranium and thorium and ores containing uranium and thorium in such proportions as may be set by the Commission.

The principle of Government monopoly which the committee has adopted as essential in reference to the production and ownership of fissionable materials is not extended to the ownership, mining or refining of source materials. Nevertheless, the committee recognizes the necessity of giving to the Commission the power to control supplies and transfers of source material by means of licensing procedures.

While source materials in their natural state are not capable of dangerous misuse, they are, as their name indicates, the source of all fissionable material and must accordingly be conserved as the Nation's most valuable mineral resource. The Commission must be assured an adequate and continuing supply of source materials for the operation of its production facilities for military or developmental purposes. The Commission is therefore empowered to take, in return for just compensation, supplies of source materials wherever found, or interests in real property containing such materials.

Deposits of source materials in the public lands are reserved to the Government except where such reservation would deprive any person of existing rights on a location, entry, or settlement made prior to the enactment of the bill. The Commission is authorized to conduct investigations and inspections on private property for the purpose of determining the location, extent, mode of supplies or occurrence, use, or conditions of supplies or deposits of such materials, but may not conduct mining operations of an exploratory nature on private property without the owner's consent. It is not the intent of the committee to authorize the Commission to engage in mining operations in competition with private mining activity unless such operations are necessary to insure to the Commission a supply of source materials adequate for carrying out its duties and responsibilities under the provisions of the bill.

In framing these provisions the committee has been alive to the necessity of encouraging the activities of independent prospectors. The traditional rights of and incentives to prospectors are substantially preserved and they are relieved of burdensome reporting requirements.

3. *Byproduct materials.*—Testimony before the committee indicates that the radioactive materials yielded in the production of fissionable material are of enormous scientific and industrial value and their distribution involves no danger to the national security. The Commission is required to distribute these materials with or without charge for research and development activities, medical therapy, and industrial and other uses, giving priority to medical uses and research.

Section 6. Military applications of atomic energy

(a) *AUTHORITY.*—The Commission is authorized to—

(1) conduct experiments and do research and development work in the military application of atomic energy; and

(2) engage in the production of atomic bombs, atomic bomb parts, or other military weapons utilizing fissionable materials; except that such activities shall be carried on only to the extent that the express consent and direction of the President of the United States has been obtained, which consent and direction shall be obtained at least once each year.

The President from time to time may direct the Commission to deliver such quantities of weapons to the armed forces for such use as he deems necessary in the interest of national defense.

(b) *PROHIBITION.*—It shall be unlawful for any person to manufacture or produce any device or equipment designed to utilize fissionable material as a military weapon except as may be (1) incident to research and development activities or (2) authorized by the Commission. Nothing in this subsection shall be deemed to modify the provisions of section 4 of this Act.

Under section 4, the Commission is made the exclusive producer of fissionable material. For reasons set forth in the analysis of section 4, and because the two operations are closely connected, the Commission is also made the exclusive producer of atomic weapons. In view of their enormous military significance, atomic weapons are subject, under the bill, to full control by the President as Commander in Chief. All determinations as to production rates, custody, and transfers are to be made by him.

In military research, as distinguished from production of atomic weapons, the committee has adhered to the general principle of allowing great latitude and freedom. The armed services, as well as private individuals, are permitted to engage in independent military research and under the provisions of section 3 are to be assisted by the Commission in their activities. It is not the intent of the committee to restrict the existing powers of military departments in entering into research and development contracts with nongovernmental organizations provided that all such contracts are in all their aspects subject to the provisions of this bill. All military research is subject to inspection and reports as provided in section 10. The Commission itself is directed to engage in military research, working through its Division of Military Application, in close cooperation with the Departments of War and Navy.

Section 7. Utilization of atomic energy

(a) *LICENSE REQUIRED.*—It shall be unlawful except as provided in sections 5 (a) (4) (A) or (B) or 6 (a), for any person to manufacture any equipment or device utilizing fissionable material or atomic energy or to utilize fissionable material or atomic energy with or without such equipment or device, except under and in accordance with a license issued by the Commission authorizing such manufacture

or utilization. No license may permit any such activity if fissionable material is produced incident to such activity, except as provided in sections 3 and 4. Nothing in this section shall be deemed to require a license for the conduct of research or development activities relating to the manufacture of such equipment or devices or the utilization of fissionable material or atomic energy, or for the manufacture or use of equipment or devices for medical therapy.

(b) **REPORT TO CONGRESS.**—Whenever in its opinion any industrial, commercial, or other nonmilitary use of fissionable material or atomic energy has been sufficiently developed to be of practical value, the Commission shall prepare a report to the President stating all the facts with respect to such use, the Commission's estimate of the social, political, economic, and international effects of such use and the Commission's recommendations for necessary or desirable supplemental legislation. The President shall then transmit this report to the Congress together with his recommendations. No license for any manufacture or use shall be issued by the Commission under this section until after (1) a report with respect to such manufacture or use has been filed with the Congress; and (2) a period of ninety days in which the Congress was in session has elapsed after the report has been so filed. In computing such period of ninety days, there shall be excluded the days on which either House is not in session because of an adjournment of more than three days.

(c) **ISSUANCE OF LICENSES.**—After such ninety-day period, unless hereafter prohibited by law, the Commission may license such manufacture or use in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this Act. The Commission is authorized and directed to issue licenses on a nonexclusive basis and to supply to the extent available appropriate quantities of fissionable material to licensees (1) whose proposed activities will serve some useful purpose proportionate to the quantities of fissionable material to be consumed; (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish; and (3) who agree to make available to the Commission such technical information and data concerning their activities pursuant to such licenses as the Commission may determine necessary to encourage similar activities by as many licensees as possible. Each such license shall be issued for a specified period, not to exceed one year, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon the expiration of such period. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results. No license may be given to any person for activities which are not under or within the jurisdiction of the United States or to any foreign government.

(d) **BYPRODUCT POWER.**—If energy which may be utilized is produced in the production of fissionable material, such energy may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities under contracts providing for reasonable resale prices.

The committee is anxious to promote the use of atomic energy in all possible fields for peacetime purposes. Testimony before the committee has shown that numerous benefits, in the field of medicine for example, are now or shortly will become available. Other uses, as yet relatively undeveloped, promise to bring about vast changes in the industrial technology which underlies our economic life.

In order to stimulate development, the bill extends the principle of free research to research on devices utilizing atomic energy. The committee is aware, nonetheless, that the sudden introduction of certain devices utilizing the power released by nuclear fission might precipitate profound economic disorganization. Great industrial installations representing Nation-wide investments, employing many thousands of workers, might be rendered obsolete.

Furthermore, devices utilizing atomic energy, if widely used, would so multiply potential hazards to national health and safety that even careful Government regulation would fail to provide adequate safeguards.

The committee feels, therefore, that the Congress should retain the opportunity of passing upon the introduction of atomic energy devices before the Commission is empowered to license their use. The bill provides:

1. Atomic energy devices can neither be manufactured nor used without a license issued by the Commission.

2. No license for manufacture or use may be issued until the Commission has made a report to the Congress stating all the facts with "respect to the use of such devices, the Commission's estimate of the social, political, economic, and international effects of such use, and the Commission's recommendations for necessary or desirable supplemental legislation."

3. No license for manufacture or use may be issued by the Commission until after a report has been filed with the Congress and a period of 90 days in which the Congress was in session has elapsed after the report has been filed.

The committee is desirous also that the provisions of the bill relating to licensing of atomic energy devices shall not interfere with the development of free competition in the use of atomic energy. Thus the bill provides that licenses on an atomic energy device, once issued, must be made available to all applicants who can meet the safety and security standards of the Commission. Royalties to be paid the patent owners of such devices are provided for in section 11.

The following additional points are to be noted:

(a) Licenses are not required (1) for research and development related to the manufacture of atomic energy devices; (2) for manufacture or use of equipment or devices for medical therapy.

(b) The bill does not permit the Commission to license the use of devices which produce fissionable material in the course of utilizing atomic energy.

Section 8. International arrangements

(a) DEFINITION.—As used in this Act, the term "international arrangement" shall mean any treaty approved by the Senate or international agreement approved by the Congress, during the time such treaty or agreement is in full force and effect.

(b) EFFECT OF INTERNATIONAL ARRANGEMENTS.—Any provision of this Act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this Act shall be deemed to be of no further force or effect.

(c) POLICIES CONTAINED IN INTERNATIONAL ARRANGEMENTS.—In the performance of its functions under this Act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

The committee recognizes that the ultimate solution to the problems posed by the development of nuclear energy and atomic weapons lies in the adoption of effective and enforceable international safeguards. The bill therefore seeks to create a system of domestic control designed to protect the common defense and security, without constituting an obstacle to the attainment of satisfactory international controls.

To insure that provisions of S. 1717 do not interfere with the operation of international control machinery, when established, section 8

expressly provides that to the extent any provision of the bill, or any action of the Commission under the bill, conflicts with the provisions of an international agreement hereafter approved by the Senate or the Congress, the provision is to be considered of no further force or effect.

The Commission is specifically instructed to perform its functions so as to give maximum effect to the policies contained in international agreements.

Section 9. Property of the Commission

(a) The President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in the following property:

(1) All fissionable material; all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable material or atomic energy; all processes and technical information of any kind, and the source thereof (including data, drawings, specifications, patents, patent applications, and other sources) relating to the processing, production, or utilization of fissionable material or atomic energy; and all contracts, agreements, leases, patents, applications for patents, inventions and discoveries (whether patented or unpatented), and other rights of any kind concerning any such items;

(2) All facilities, equipment, and materials, devoted primarily to atomic energy research and development; and

(3) Such other property owned by or in the custody or control of the Manhattan Engineer District or other Government agencies as the President may determine.

(b) In order to render financial assistance to those States and localities in which the activities of the Commission are carried on and in which the Commission has acquired property previously subject to State and local taxation, the Commission is authorized to make payments to State and local governments in lieu of property taxes. Such payments may be in the amounts, at the times, and upon the terms the Commission deems appropriate, but the Commission shall be guided by the policy of not making payments in excess of the taxes which would have been payable for such property in the condition in which it was acquired, except in cases where special burdens have been cast upon the State or local government by activities of the Commission, the Manhattan Engineer District, or their agents. In any such case, any benefit accruing to the State or local government by reason of such activities shall be considered in determining the amount of the payment. The Commission, and the property, activities, and income of the Commission, are hereby expressly exempted from taxation in any manner or form by any State, county, municipality, or any subdivision thereof.

The Commission is to take over all the resources of the United States Government devoted to or related to atomic energy development. This includes all atomic weapons, all property of the Manhattan Engineer District, and all patents, materials, plants and facilities, contracts, and information relating primarily to atomic energy. The Commission is authorized to reimburse States and municipalities for loss in taxes incurred through its acquisition of property.

Section 10. Control of information

(a) **POLICY.**—It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy, the Commission shall be guided by the following principles:

(1) That information with respect to the use of atomic energy for industrial purposes should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established; and

(2) That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.

(b) **DISSEMINATION.**—The Commission is authorized and directed to establish such information services, publications, libraries, and other registers of available information as it may deem necessary or desirable to provide for the dissemination of information in accordance with subsection (a).

(c) RESTRICTIONS.—

(1) The term "restricted data" as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security.

(2) Whoever, lawfully or unlawfully, having possession of, access to, control over, or being entrusted with, any document, writing, sketch, photograph, plan, model, instrument, appliance, note, or information involving or incorporating restricted data—

(A) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with intent to injure the United States or with intent to secure an advantage to any foreign nation, upon conviction thereof, shall be punished by a fine of not more than \$20,000 or imprisonment for not more than twenty years, or both;

(B) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with reason to believe such data will be utilized to injure the United States or to secure an advantage to any foreign nation, shall, upon conviction, be punished by a fine of not more than \$10,000 or imprisonment for not more than ten years, or both.

(3) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, acquires or attempts or conspires to acquire any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or imprisonment for not more than twenty years, or both.

(4) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, removes, conceals, tampers with, alters, mutilates, or destroys any document, writing, sketch, photograph, plan, model, instrument, appliance, or note involving or incorporating restricted data and used by any individual or person in connection with the production of fissionable material, or research or development relating to atomic energy, conducted by the United States, or financed in whole or in part by Federal funds, or conducted with the aid of fissionable material, shall be punished by a fine of not more than \$20,000 or imprisonment for not more than twenty years, or both.

(5) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised and consulted with the Commission with respect to such prosecution.

(6) This section shall not exclude the applicable provisions of any other laws, except that no Government agency shall take any action under such other laws inconsistent with the provisions of this section.

(d) INSPECTIONS, RECORDS, AND REPORTS.—The Commission is—

(1) authorized by regulation or order to require such reports and the keeping of such records with respect to, and to provide for such inspections of, activities and studies of types specified in section 3 and of activities under licenses issued pursuant to section 7 as the Commission may determine;

(2) authorized and directed by regulation or order to require regular reports and records with respect to, and to provide for frequent inspections of, the production of fissionable material in the conduct of research and development activities.

This provision, of vital importance to the Nation's security, was completed by the committee after weighing carefully the objectives to be attained. The problems are especially difficult because vital objectives in a sense compete with or are in direct conflict with one another. The common defense and security require control over information which might help other nations to build atomic weapons or power plants (until effective international safeguards are established) and, at the same time, sufficient freedom of interchange between scientists to assure the Nation of continued scientific progress. Section 10 expressly states these policy considerations of opposite tendency and attempts to frame a program that will reconcile their apparent divergence.

The dissemination of certain information or the mishandling of certain materials with intent to injure the United States or to secure an advantage to a foreign nation is prohibited, subject to a maximum penalty of 20 years' imprisonment and \$20,000 fine. Dissemination of such information with reason to believe that such injury or advantage will result is also prohibited, subject to a maximum penalty of 10 years' imprisonment and \$10,000 fine.

The information involved in these penalties is defined in the act and placed in a restricted category. But the Commission is empowered and directed to remove information from the restricted category wherever its publication will not adversely affect the common defense and security.

Subsection (c) (5) of this section assures consistency of action between Government agencies. It prohibits any agency from placing information in a restricted category under the authority of this or any other law once such information has been released from the category by official action of the Atomic Energy Commission. While the Atomic Energy Commission under this provision determines which information remains in the restricted category, it may not by regulation or otherwise prescribe the persons who may disseminate or receive it. Subsection (b) directs the Commission to aid in the dissemination of unrestricted information.

Subsection (c) (4), providing that no person shall be prosecuted for violation of the provisions of the section unless and until the Attorney General has advised and consulted with the Commission, was inserted as an assurance to scientists working in atomic energy fields that prosecutions would not be initiated without review by persons having the technical and scientific background necessary to determine the significance of the acts complained of.

Subsection (d) authorizes the Commission to keep constantly informed of all activities relating to atomic energy both by reports and actual inspections. The Commission is directed to pay special attention to activities involving the production of fissionable material.

Section 11. Patents and inventions

(a) PRODUCTION AND MILITARY UTILIZATION.—

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any patent granted for any such invention or discovery is hereby revoked, and just compensation shall be made therefor.

(2) No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(3) Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon shall file with the Commission a report containing a complete description thereof, unless such invention or discovery is described in an application for a patent filed in the Patent Office by such person within the time required for the filing of such report. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (A) The sixtieth day after the date of enactment of this Act; (B) the sixtieth day after the completion of such invention or discovery; or (C) the sixtieth day after such person first discovers or first has reason to believe that such invention or discovery is useful in such production or utilization.

(b) **USE OF INVENTIONS FOR RESEARCH.**—No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(c) **NONMILITARY UTILIZATION.**—

(1) It shall be the duty of the Commission to declare any patent to be affected with the public interest if (A) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy; and (B) the licensing of such invention or discovery under this subsection is necessary to effectuate the policies and purposes of this Act.

(2) Whenever any patent has been declared, pursuant to paragraph (1) to be affected with the public interest—

(A) The Commission is hereby licensed to use the invention or discovery covered by such patent in performing any of its powers under this Act; and

(B) Any person to whom a license has been issued under section 7 is hereby licensed to use the invention or discovery covered by such patent to the extent such invention or discovery is used by him in carrying on the activities authorized by his license under section 7.

The owner of the patent shall be entitled to a reasonable royalty fee for any use of an invention or discovery licensed by this subsection. Such royalty fee may be agreed upon by such owner and the licensee, or in the absence of such agreement shall be determined by the Commission.

(3) No court shall have jurisdiction or power to stay, restrain, or otherwise enjoin the use of any invention or discovery by a licensee, to the extent that such use is licensed by paragraph (2) above, on the ground of infringement of any patent. If in any action for infringement against such licensee the court shall determine that the defendant is exercising such license, the measure of damages shall be the royalty fee determined pursuant to this section, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court. If no royalty fee has been determined, the court shall stay the proceeding until the royalty fee is determined pursuant to this section. If any such licensee shall fail to pay such royalty fee, the patentee may bring an action in any court of competent jurisdiction for such royalty fee, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court.

(d) **ACQUISITION OF PATENTS.**—The Commission is authorized to purchase, or to take, requisition, or condemn, and make just compensation for, (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or patent application covering any such invention or discovery. The Commissioner of Patents shall notify the Commission of all applications for patents heretofore or hereafter filed which in his opinion disclose such inventions or discoveries and shall provide the Commission access to all such applications.

(e) **COMPENSATION AWARDS, AND ROYALTIES.**—

(1) **PATENT COMPENSATION BOARD.**—The Commission shall designate a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications under this subsection.

(2) **ELIGIBILITY.**—

(A) Any owner of a patent licensed under subsection (c) (2) or any licensee thereunder may make application to the Commission for the determination of a reasonable royalty fee in accordance with such procedures as it by regulation may establish.

(B) Any person seeking to obtain the just compensation provided in subsections (a), (b), or (d) shall make application therefor to the Commission in accordance with such procedures as it may by regulation establish.

(C) Any person making any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon who is not entitled to compensation therefor under subsection (a) and who has complied with subsection (a) (3) above may make application to the Commission for, and the Commission may grant, an award.

(D) Any person making application under this subsection shall have the right to be represented by counsel.

(3) STANDARDS.—

(A) In determining such reasonable royalty fee, the Commission shall take into consideration any defense, general or special, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, such patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and may consider the cost to the owner of the patent of developing such invention or discovery or acquiring such patent.

(B) In determining what constitutes just compensation under subsection (a), (b), or (d) above, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery, and may determine that such compensation be paid in periodic payments or in a lump sum.

(C) In determining the amount of any award under paragraph (2) (C) of this subsection, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery. Awards so made may be paid by the Commission in periodic payments or in a lump sum.

(4) JUDICIAL REVIEW.—Any person aggrieved by any determination of the Commission of an award or of a reasonable royalty fee may obtain a review of such determination in the Court of Appeals for the District of Columbia by filing in such court, within thirty days after notice of such determination, a written petition praying that such determination be set aside. A copy of such petition shall be forthwith served upon the Commission and thereupon the Commission shall file with the court a certified transcript of the entire record in the proceeding, including the findings and conclusions upon which the determination was based. Upon the filing of such transcript the court shall have exclusive jurisdiction upon the record certified to it to affirm the determination in its entirety or set it aside and remand it to the Commission for further proceedings. The findings of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. The court's judgment shall be final, subject, however, to review by the Supreme Court of the United States upon writ of certiorari on petition therefor under section 240 of the Judicial Code (U. S. C., title 28, sec. 347), by the Commission or any party to the court proceeding.

In sections 4 and 6 the bill provides for a Government monopoly of the production of fissionable material and atomic weapons. In considering the patent implications of these provisions, the committee concluded that private patents can play no role in fields of activity reserved exclusively to the Government. For this reason, and to eliminate risks of disclosure of restricted information, risks which would be certain to arise under normal patent procedures, the bill provides that inventions and discoveries in these fields shall not be patentable matter. To assure the Commission of access to new inventions and to provide inventors with financial inducements in lieu of patent rights, the bill requires that such inventions be reported to the Commission and creates a Patent Compensation Board with authority to make awards to inventors.

In order to make the peacetime benefits of atomic energy widely available, the bill provides that the grant of a license under section 7 carries with it the right to use any patented invention or discovery which the Commission has declared to be affected with the public interest. Any such use is subject to the payment of reasonable royalty fees to be determined by the Patent Compensation Board.

Any person applying for an award or compensation or for the determination of a reasonable royalty fee has the right to be represented by counsel. In each case the Commission's decisions are subject to judicial review.

Section 12. General authority

(a) In the performance of its functions the Commission is authorized to—

(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and byproduct materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this Act, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony Act of February 11, 1893 (U. S. C., title 49, sec. 46), shall apply with respect to any individual who specifically claims such privilege. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) appoint and fix the compensation of such officers and employees as may be necessary to carry out the functions of the Commission. Such officers and employees shall be appointed in accordance with the civil-service laws and their compensation fixed in accordance with the Classification Act of 1923, as amended, except that to the extent the Commission deems such action necessary to the discharge of its responsibilities, personnel may be employed and their compensation fixed without regard to such laws. Attorneys appointed under this paragraph may appear for and represent the Commission in any case in any court. The Commission shall make adequate provision for administrative review of any determination to dismiss any employee;

(5) acquire such materials, property, equipment, and facilities, establish or construct such buildings and facilities, and modify such buildings and facilities from time to time as it may deem necessary, and construct, acquire, provide, or arrange for such facilities and services (at project sites where such facilities and services are not available) for the housing, health, safety, welfare, and recreation of personnel employed by the Commission as it may deem necessary;

(6) with the consent of the agency concerned, utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this Act;

(8) contract for the expenditure of funds for the purposes specified in section 10 (b) without regard to the provisions of section 87 of the Act of January 12, 1895 (28 Stat. 622), and section 11 of the Act of March 1, 1919 (40 Stat. 1270; U. S. C., title 44, sec. 111); and

(9) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) SECURITY.—The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

This section contains various general grants of authority to the Commission to enable it to discharge its responsibilities. These include authority to—

(a) Establish advisory boards to make recommendations on the Commission's various functions.

(b) Establish safety and health regulations for the possession and use of fissionable and byproduct materials to minimize the danger from explosion, radioactivity, and other harmful or toxic effects incident to the presence of such materials.

(c) Make studies and investigations, and hold hearings and summon witnesses to assist in carrying out its duties.

(d) Appoint officers and employees, use the services and employees of other agencies, and utilize voluntary or uncompensated personnel wherever desirable. Appointments are to be made in accordance with civil-service laws but the Commission may, whenever it deems the action necessary, make appointments without regard to such laws. Reluctant as the committee is to depart from the established framework of the civil-service laws, it considers the grant of this exempting authority to the Commission essential to assure the Commission sufficient flexibility in the conduct of its large-scale and varied operations, and to insure availability to the Commission of personnel of the highest caliber.

(e) Acquire materials, property, and other equipment, erect buildings and acquire and sell real and personal property.

(f) Dispose of radioactive materials and make other special dispositions for reasons of national security without regard to the provisions of other laws.

As a precaution against unforeseen contingencies, the President is granted limited authority to exempt specific actions of the Commission from applicable laws whenever such action is essential for security reasons.

Section 13. Compensation for private property acquired

(a) The United States shall make just compensation for any property or interests therein taken or requisitioned pursuant to sections 5 and 11. The Commission shall determine such compensation. If the compensation so determined is unsatisfactory to the person entitled thereto, such person shall be paid 50 per centum of the amount so determined, and shall be entitled to sue the United States in the Court of Claims or in any district court of the United States in the manner provided by sections 24 (20) and 145 of the Judicial Code to recover such further sum as added to said 50 per centum will make up such amounts as will be just compensation.

(b) In the exercise of the rights of eminent domain and condemnation, proceedings may be instituted under the Act of August 1, 1888 (U. S. C., title 40, sec. 257), or any other applicable Federal statute. Upon or after the filing of the condemnation petition, immediate possession may be taken and the property may be occupied, used, and improved for the purposes of this Act, notwithstanding any other law. Real property acquired by purchase, donation, or other means of transfer may also be occupied, used, and improved for the purposes of this Act, prior to approval of title by the Attorney General.

Consonant with the broad duties and operating responsibilities assigned to the Atomic Energy Commission, the bill grants to the Commission the appropriate requisitioning powers and powers of eminent domain. Thus, under section 5, the Commission must acquire all fissionable materials and may requisition stocks of uranium ore or lands containing uranium ore; under section 11, the Commission may acquire any invention or discovery or any patent covering an invention

or discovery "useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy."

Section 13 provides that compensation for property so acquired is to be determined initially by the Commission. If the compensation determined by the Commission is unsatisfactory to the person entitled to it, half the amount is to be paid to him immediately and he is entitled to sue in the Court of Claims for such balance as the court may determine represents just compensation.

The Commission is granted authority to take immediate possession of property acquired by eminent domain or requisitioning without awaiting completion of litigation.

Section 14. Joint Committee on Atomic Energy

(a) There is hereby established a Joint Committee on Atomic Energy to be composed of nine Members of the Senate to be appointed by the President of the Senate, and nine Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. In each instance not more than five members shall be members of the same political party.

(b) The joint committee shall make continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. The Commission shall keep the joint committee fully and currently informed with respect to the Commission's activities. All bills, resolutions, and other matters in the Senate or the House of Representatives relating primarily to the Commission or to the development, use, or control of atomic energy shall be referred to the joint committee. The members of the joint committee who are Members of the Senate shall from time to time report to the Senate, and the members of the joint committee who are Members of the House of Representatives shall from time to time report to the House, by bill or otherwise, their recommendations with respect to matters within the jurisdiction of their respective Houses which are (1) referred to the joint committee or (2) otherwise within the jurisdiction of the joint committee.

(c) Vacancies in the membership of the joint committee shall not affect the power of the remaining members to execute the functions of the joint committee, and shall be filled in the same manner as in the case of the original selection. The joint committee shall select a chairman and a vice chairman from among its members.

(d) The joint committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such places and times, to require, by subpoena or otherwise, the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words. The provisions of sections 102 to 104, inclusive, of the Revised Statutes shall apply in case of any failure of any witness to comply with a subpoena or to testify when summoned under authority of this section.

(e) The joint committee is empowered to appoint and fix the compensation of such experts, consultants, technicians, and clerical and stenographic assistants as it deems necessary and advisable, but the compensation so fixed shall not exceed the compensation prescribed under the Classification Act of 1923, as amended, for comparable duties. The committee is authorized to utilize the services, information, facilities, and personnel of the departments and establishments of the Government.

The importance of the field of atomic energy, coupled with the unique character of the problems raised by its development, makes it peculiarly desirable and necessary that the Congress be fully acquainted at all times with the work of the Commission. The bill in section 16 makes provision for reports which will contribute to this end.

More important, however, is the provision for the establishment of a joint congressional committee, to be composed of nine Members of the Senate and nine Members of the House of Representatives, directed to make continuing studies of the activities of the Atomic Energy Commission and of problems related to the development, use, and control of atomic energy.

The joint committee is empowered to hold hearings, to act on legislation, and to equip itself with a staff of such experts and technicians as it deems necessary to carry out its functions.

The usefulness of such a committee in focusing responsibility in the Congress and in keeping the legislature informed cannot be over-emphasized. The joint committee will be in a position to give substantial aid to the Appropriations Committee; and to give consideration to supplementary and amending legislation as the need arises.

Section 15. Enforcement

(a) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of sections 4 (b), 5 (a) (3), or 6 (b) shall, upon conviction thereof, be punished by a fine of not more than \$10,000 or by imprisonment for not more than five years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(b) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this Act other than those specified in subsection (a) and other than section 10 (c), or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (d), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than two years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(c) Whenever in the judgment of the Commission any person has engaged or is about to engage in any acts or practices which constitute or will constitute a violation of any provision of this Act, or any regulation or order issued thereunder, it may make application to the appropriate court for an order enjoining such acts or practices, or for an order enforcing compliance with such provision, and upon a showing by the Commission that such person has engaged or is about to engage in any such acts or practices a permanent or temporary injunction, restraining order, or other order shall be granted without bond.

(d) In case of failure or refusal to obey a subpoena served upon any person pursuant to section 12 (a) (3), the district court for any district in which such person is found or resides or transacts business, upon application by the Commission, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, or both, in accordance with the subpoena; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

This section provides penalties for violation of the several provisions of the bill. These include prohibitions against—

1. The ownership or production of fissionable material.
2. Ownership of production facilities.
3. Manufacture of atomic weapons.
4. Violation of reporting and inspection requirements.

Willful violation of these provisions is made punishable by fine and imprisonment, determined by the seriousness of the offense. Violation with intent to injure the United States or help a foreign power is punishable by a maximum penalty of 20 years' imprisonment and a fine of \$20,000.

The Commission is also given the power to apply to the courts for injunctions. Federal courts are authorized to issue orders enforcing the Commission's subpoenas.

Section 16. Reports

The Commission shall submit to the Congress, in January and July of each year, a report concerning the activities of the Commission. The Commission shall include in such report, and shall at such other times as it deems desirable submit to the Congress, such recommendations for additional legislation as the Commission deems necessary or desirable.

This section is to be evaluated in conjunction with the purposes set forth in establishing a joint congressional committee under section 14. As part of the program for keeping the legislature informed, the Commission is to make semiannual reports to the Congress detailing its activities, and additional reports including recommendations for legislation as the Commission deems necessary or desirable.

Section 17. Definitions

As used in this Act—

(a) The term "atomic energy" shall include all forms of energy liberated in the transmutation of atomic species.

(b) The term "Government agency" means any executive department, commission, independent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other establishment, in the executive branch of the Government.

(c) The term "person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions.

(d) The term "United States", when used in a geographical sense, includes all Territories and possessions of the United States.

(e) The term "research and development" means theoretical analysis, exploration, and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

This section states definitions of the following terms: Atomic energy, Government agency, person, United States, research, and development.

Section 18. Appropriations

(a) There are hereby authorized to be appropriated such sums as may be necessary and appropriate to carry out the provisions and purposes of this Act. The Acts appropriating such sums may appropriate specified portions thereof to be accounted for upon the certification of the Commission only. Funds appropriated to the Commission shall, if obligated by contract during the fiscal year for which appropriated, remain available for expenditure for four years following the expiration of the fiscal year for which appropriated. After such four-year period, the unexpended balances of appropriations shall be carried to the surplus fund and covered into the Treasury.

(b) Such part as the President may determine of the unexpended balances of appropriations, allocations, or other funds available for expenditure in connection with the Manhattan Engineer District are hereby transferred to the Commission and shall be available for expenditure for the purpose of carrying out the provisions of this Act.

In providing authority for appropriations, the committee is aware that the nature of expenditures on atomic energy development has, until now, been a military secret. There is no justification in peacetime for continuing this sweeping practice. Certain critical areas of activity will nevertheless continue to touch closely upon the national defense. To assure the maintenance of security in connection with

expenditures in such areas, the bill provides that future appropriation acts "may appropriate specified portions thereof to be accounted for upon the certification of the Commission only."

Funds obligated but not expended during any fiscal year are to remain available for expenditure during four succeeding years. The unexpended balances of the Manhattan Engineer District are to be transferred to the Commission in such portion as the President may determine.

Section 19. Separability of provisions

If any provision of this Act, or the application of such provision to any person or circumstances, is held invalid, the remainder of this Act or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

If any provision of the bill is held invalid, other provisions are not to be affected thereby.

Section 20. Short title

This Act may be cited as the "Atomic Energy Act of 1946."

APPENDIX

I. TEXT OF THE AGREED DECLARATION ON ATOMIC ENERGY BY THE PRESIDENT OF THE UNITED STATES, THE PRIME MINISTER OF THE UNITED KINGDOM, AND THE PRIME MINISTER OF CANADA, ISSUED NOVEMBER 15, 1945

THE PRESIDENT OF THE UNITED STATES, THE PRIME MINISTER OF THE UNITED KINGDOM, AND THE PRIME MINISTER OF CANADA have issued the following statement:

1. We recognize that the application of recent scientific discoveries to the methods and practice of war has placed at the disposal of mankind means of destruction hitherto unknown, against which there can be no adequate military defense, and in the employment of which no single nation can in fact have a monopoly.

2. We desire to emphasize that the responsibility for devising means to insure that the new discoveries shall be used for the benefit of mankind, instead of as a means of destruction, rests not on our nations alone, but upon the whole civilized world. Nevertheless, the progress that we have made in the development and use of atomic energy demands that we take an initiative in the matter, and we have accordingly met together to consider the possibility of international action—

(a) to prevent the use of atomic energy for destructive purposes;

(b) to promote the use of recent and future advances in scientific knowledge, particularly in the utilization of atomic energy, for peaceful and humanitarian ends.

3. We are aware that the only complete protection for the civilized world from the destructive use of scientific knowledge lies in the prevention of war. No system of safeguards that can be devised will of itself provide an effective guaranty against production of atomic weapons by a nation bent on aggression. Nor can we ignore the possibility of the development of other weapons or of new methods of warfare which may constitute as great a threat to civilization as the military use of atomic energy.

4. Representing, as we do, the three countries which possess the knowledge essential to the use of atomic energy, we declare at the outset our willingness, as a first contribution, to proceed with the exchange of fundamental scientific information and the interchange of scientists and scientific literature for peaceful ends with any nation that will fully reciprocate.

5. We believe that the fruits of scientific research should be made available to all nations, and that freedom of investigation and free interchange of ideas are essential to the progress of knowledge. In pursuance of this policy, the basic scientific information essential to the development of atomic energy for peaceful purposes has already

been made available to the world. It is our intention that all further information of this character that may become available from time to time shall be similarly treated. We trust that other nations will adopt the same policy, thereby creating an atmosphere of reciprocal confidence in which political agreement and cooperation will flourish.

6. We have considered the question of the disclosure of detailed information concerning the practical industrial application of atomic energy. The military exploitation of atomic energy depends, in large part, upon the same methods and processes as would be required for industrial uses.

We are not convinced that the spreading of the specialized information regarding the practical application of atomic energy, before it is possible to devise effective, reciprocal, and enforceable safeguards acceptable to all nations, would contribute to a constructive solution of the problem of the atomic bomb. On the contrary, we think it might have the opposite effect. We are, however, prepared to share, on a reciprocal basis with others of the United Nations, detailed information concerning the practical industrial application of atomic energy just as soon as effective enforceable safeguards against its use for destructive purposes can be devised.

7. In order to attain the most effective means of entirely eliminating the use of atomic energy for destructive purposes and promoting its widest use for industrial and humanitarian purposes, we are of the opinion that at the earliest practicable date a commission should be set up under the United Nations Organization to prepare recommendations for submission to the Organization.

The Commission should be instructed to proceed with the utmost dispatch and should be authorized to submit recommendations from time to time dealing with separate phases of its work.

In particular the Commission should make specific proposals—

(a) for extending between all nations the exchange of basic scientific information for peaceful ends;

(b) for control of atomic energy to the extent necessary to insure its use only for peaceful purposes;

(c) for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction;

(d) for effective safeguards by way of inspection and other means to protect complying States against the hazards of violations and evasions.

8. The work of the Commission should proceed by separate stages, the successful completion of each one of which will develop the necessary confidence of the world before the next stage is undertaken. Specifically it is considered that the Commission might well devote its attention first to the wide exchange of scientists and scientific information, and as a second stage to the development of full knowledge concerning natural resources of raw materials.

9. Faced with the terrible realities of the application of science to destruction, every nation will realize more urgently than before the overwhelming need to maintain the rule of law among nations and to banish the scourge of war from the earth. This can only be brought about by giving wholehearted support to the United Nations Organization, and by consolidating and extending its authority, thus creating

conditions of mutual trust in which all peoples will be free to devote themselves to the arts of peace. It is our firm resolve to work without reservation to achieve these ends.

HARRY S. TRUMAN,
President of the United States.

C. R. ATTLEE,
Prime Minister of the United Kingdom.

W. L. MACKENZIE KING,
Prime Minister of Canada.

THE WHITE HOUSE, THE CITY OF WASHINGTON,
November 15, 1945

II. ATOMIC ENERGY: DEVELOPMENT AND APPLICATION¹

To the familiar fields of civil, mechanical, electrical, electronic, and chemical engineering, a new one has been added by the physicists—nuclear engineering. Before the war, nuclear physics had provided practical engineers with a host of new things having peaceful uses—neutrons for cancer therapy, artificial radioactive materials for treatment of leukemia and cancer and for use in fundamental chemical studies, both in biology and in chemical industry. So important was this field of work just before the war that several large companies were considering the manufacture and sale of radioactive materials. The war interrupted this activity and placed over all nuclear research a tight secrecy restriction, but it enormously accelerated the research that resulted so dramatically in the atomic bomb.

With the war ended, we can devote our energies to active cultivation of the applications of nuclear engineering to peaceful purposes—to better ways of producing neutrons and high-energy electrons for therapy and artificial radioactive materials for all kinds of uses. Moreover, we are standing on the threshold of the era in which atomic power will be developed.

All sorts of prophecies are being made about atomic power. Some say it will come only in the very distant future and may not then be practical; others are rashly predicting automotive power from U-235 in a very few years. The wide variance in predictions comes about largely, of course, from the fact that most of the prophets have little more than a crystal ball to guide them. Whatever the prophets say, atomic energy will surely offer some of the most important engineering possibilities of the next generation.

Let us get the main points of the story in terms of answers to some simple questions.

What is atomic energy?—All energy used industrially comes either from the work done by falling water or from the combustion of fuels—coal and petroleum products, principally. In combustion of coal the atoms of carbon (C) in the coal combine with the oxygen (O) of the air to form carbon dioxide (CO_2). At the same time, energy is released in the form of heat. The facts to remember are these:

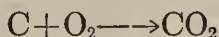
(1) The atoms involved in the process are not changed intrinsically: the carbon atom of the coal is still a carbon atom in the CO_2 of the flue gas; the oxygen atoms, likewise, are unaffected.

(2) The energy made available does not come from perceptible changes in the carbon and oxygen atoms that combine.

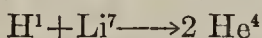
Now a combination of the elements of two substances without change in the elements themselves is known as a *chemical reaction*, and the energy released, as *chemical energy*. *Atomic energy*, on the other hand, is that associated with changes in the basic *physical*

¹ By Dr. E. U. Condon, Director of the National Bureau of Standards and Scientific Adviser to the Senate Special Committee on Atomic Energy. This article was first published in slightly different form in the *Westinghouse Engineer* for November 1945.

nature of the atoms. The atoms are not merely recombined, but lose their individuality. In a chemical reaction, atoms of the same kind are present before and after, as in the combustion process referred to above:



But in nuclear reactions, atoms are made to react in such a fundamental way that at the end of the process the atoms are not the same as those we start with. The atoms of hydrogen, for example, can be made to react with those of lithium to produce a different kind of atom; in other words a *different element*, helium:²



This reaction was an English discovery made in 1932. It is a process which actually occurs in the laboratory, and constitutes an atomic transformation of the kind the alchemists sought fruitlessly to achieve for centuries. It lies quite outside the scope of the classical ideas of chemistry.

The amount of energy released in the nuclear reaction of hydrogen and lithium is enormous. When by ordinary chemical reaction a molecule of CO_2 is formed, the energy released, measured in units used by the physicists, is 4.1 electron-volts. In the nuclear reaction by which hydrogen and lithium give helium, the energy released is *17,000,000 electron-volts per atom of lithium consumed*—millions of times greater, weight for weight, than the chemical energy released in the burning of coal. And so, generally, in nuclear reactions, for the weights of fuel involved, the energy released is millions of times greater than that released in chemical reactions.

Why is not atomic energy obtainable practically by "nuclear burning" of hydrogen and lithium to form helium?—The answer is furnished by comparison with coal. Coal (or any other chemical fuel) is valuable not only because of the energy release, but also because a self-maintaining fire can be made in which carbon and oxygen continue to burn. Of what use would coal be if a thousand dollars' worth of matches were needed to burn a ton of coal? That was essentially the situation with all nuclear reactions prior to discovery of the phenomenon of uranium fission in 1939.

To make hydrogen atoms react with lithium it was necessary to ionize them and accelerate them in some kind of high-voltage apparatus. Of the many atoms accelerated thus to act as "bullets," only a few struck the target, i. e., the lithium atoms, in such a way as to react. The energy used to accelerate the atoms which did not strike the target was wasted. The net result was that more energy was put into the experiment than was released. The over-all output-input ratio was less than one.

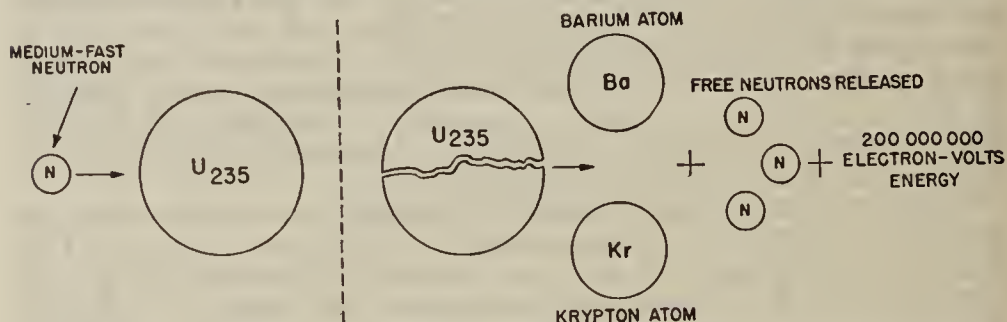
Hence from 1932 to 1939, while we knew that large energy releases were possible from many different nuclear reactions, these could be produced only in laboratory apparatus that required more energy for operation than was liberated by the nuclear reactions.

How did uranium fission change this picture?—However, as soon as the word of discovery of uranium fission reached this country from Germany in January 1939, it was at once realized by physicists that

² In equations such as that given here the letter denotes one atom of the kind indicated by the chemical symbol and the superscript gives the rough atomic weight of the atom. This equation indicates the transformation of 1 atom of hydrogen and 1 atom of lithium into 2 atoms of helium.

the possibility of getting atomic power in useful form was within reach. But first let us say what uranium fission is. The uranium atom is the heaviest atom occurring in nature. The nucleus of a uranium atom contains 92 protons, and this nucleus is surrounded by 92 electrons. One kind of uranium nucleus, U-235, contains, in addition to the 92 protons, 143 neutrons, giving a total weight (i. e., atomic weight) of 235. (For explanations of these terms—neutron, proton, atomic weight, etc.—see the glossary). Another kind, U-238, contains 146 neutrons, raising the weight to 238. These two kinds of atoms, as well as a third rare type, U-234, are closely intermingled in ordinary uranium, with the U-238 atoms greatly predominating. When a neutron strikes the nucleus of a uranium atom in just the right way, the nucleus breaks up into two approximately equal fragments, each of which is the atom of a different element. This fission is accompanied by the release of about 200,000,000 electron-volts per atom split. Great as this is, it is no better, weight for weight, than the reaction that forms helium from hydrogen and lithium; in fact, it is only about half as great a release of energy.

The essential thing about uranium fission is that the uranium atom, as it falls apart into two more or less equal fragments, *liberates several*



Release of atomic energy depends on the phenomenon known as fission. A neutron moving with the right velocity strikes a uranium-235 atom (or plutonium atom) which breaks into two middle-size atoms whose total masses are very slightly less than the mass of the disintegrating atom. The difference appears as an enormous amount of energy, according to the Einstein law of mass and energy equivalence.

more free neutrons. Since the neutrons act as bullets hitting the uranium atom nucleus as a target, and the target itself liberates more neutrons, a self-maintaining process ensues. The splitting, in other words, requires a neutron to make it go, and the splitting process itself acts as a source of neutrons which causes more uranium atoms to split. Here we have the basis of a self-maintaining process, technically known as a *chain reaction*. A chain reaction is to nuclear reactions what ordinary combustion is to chemical reactions.

Why, then, does not ordinary uranium explode spontaneously, or at least "burn nuclearly"?—There are complications. Theoretically, when several neutrons are released at every fission, a chain reaction is possible. But to make it an actuality, one of the several neutrons released must actually produce another fission to keep the process going. Otherwise, the nuclear "fire" goes out. If all the neutrons released produced more fission, the material would explode violently. But neutrons move rather freely through matter (like X-rays) and are thus lost by escaping through the surface. The remedy is to use a big enough lump of uranium so as to get a smaller surface-to-volume ratio. If the lump is large enough to sustain an automatic chain

reaction, it is said to be of the "*critical size*." In a mass of fissionable material (pure U-235 or plutonium) of the critical size, there is a high probability that the neutrons traveling through it will smash the nuclei of other uranium atoms before escaping, thus making possible the chain reaction.

Another complication is that impurities in the uranium tend strongly to absorb neutrons. This is very difficult to remedy, for appreciable losses result from the presence of only one part per million of some materials, and it is no easy matter to manufacture anything of that purity on an industrial scale.

The worst complication of all is that uranium itself absorbs neutrons in other ways than those that produce fission. It turns out that the over-all effect of this nonfission absorption of neutrons by uranium is sufficiently great to prevent the explosion of perfectly pure uranium, even in so large a lump that escape of neutrons through the surface is negligible.

To understand this clearly, some facts about neutrons are in order. Neutrons given out in the fission process are "fast," i. e., have speeds corresponding to several million electron-volts of kinetic energy. Now fast neutrons colliding with uranium atoms are likely, because of their speed, to pass through them, losing energy in the process without being captured and without producing fission. Gradually such neutrons are slowed down to intermediate speeds, at which point they are unable to produce fission in the U-238 atoms, which constitute the overwhelming bulk of ordinary uranium. At intermediate speeds, they may produce fission in U-235 atoms, but since these make up only one one-hundred-and-fortieth part of natural uranium, it is easy to see that the neutrons released by this small group would not sustain a chain reaction amidst a large group of nonreacting atoms.

If a neutron moves about, uncaptured, until it reaches a very low energy level (about 10 electron-volts), it is likely to be captured by a U-238 atom; in this case it will not cause fission, but will change the U-238 to U-239. Two important facts stem from this phenomenon: (1) It explains the production of plutonium. More of this later. (2) It explains why a chain reaction cannot be maintained in ordinary uranium, for so many neutrons are used up in this way that an insufficient number remains to produce fission.

The clue to *possibly* setting up a chain reaction in ordinary pure metallic uranium, which contains all kinds of uranium atoms but is predominantly U-238, was to arrange the uranium in a lattice. At various regular points throughout the lattice were placed lumps of uranium; the area between was filled up with some material designed to slow up the neutrons as they came shooting out of the uranium at high speeds. Thus slowed, the neutrons would pass back into the uranium. The same process might be repeated for a given neutron over and over again. The idea was that most neutrons would thus escape being caught by U-238 until they had lost so much energy that capture by U-238 was unlikely. Ultimately, they would return to the uranium lumps and be of sufficiently reduced speed to cause fission in U-235.

In the technical vocabulary of nuclear engineering, this other material that keeps neutrons escaping from the uranium in custody and helps them lose energy until they are safe from capture by U-238 is called the *moderator*. Evidently the moderator material must not

absorb too many neutrons, for if it does the reaction will be stopped. Besides the quality of not absorbing neutrons, the moderator material should have a low atomic weight. This is because the neutrons to be slowed collide elastically with the nuclei of the atoms of the moderator material, and so give up more energy at each impact if the two participants of this collision have approximately the same mass. The lower the atomic weight of a material, the closer do its nuclei come to fulfilling this condition. The nucleus of hydrogen, the element of lowest atomic weight, is a single proton which has very nearly the same mass as a neutron. From this viewpoint, ordinary water, because of its hydrogen content, would be ideal for a moderator material. Unfortunately, however, it absorbs too many neutrons. Heavy water (see glossary) does not absorb too many neutrons, but previously it was not available in sufficient quantity. Metallic beryllium is a possibility, but proved too expensive. Finally, as explained below, graphite was adopted as a moderator for the production of plutonium in the atom bomb project, although not until processes were developed for manufacturing it to much higher standards of purity than is usual in ordinary industrial practice.

As this knowledge about the qualities of uranium and the various moderators was developed, up to January 1942 the question of whether a chain reaction would really take place remained unanswered because of lack of exact measurements of the various absorptions involved. But as knowledge accumulated, it became more and more probable that such a lattice, or "pile," of uranium lumps and moderator would work, i. e., a chain reaction continuously releasing atomic energy by fission of the U-235 in it would be self-maintaining.

How can the pile be kept from blowing up?—If a pile is so arranged that, on the average, more than one fission results from the neutrons produced by each fission, then clearly the number of neutrons present and the amount of heat generated increase by the compound-interest law. If a great multiplication happens rapidly—say in a small fraction of a second—then the phenomenon becomes an explosion. In short, we have an atomic bomb. Even if the reaction occurs slowly the pile would soon be destroyed by melting if the multiplication were allowed to proceed.

One way to control the pile is to provide passageways through it into which rods of material that strongly absorb neutrons can be placed. When these rods are in, they absorb so many neutrons that the chain reaction is stopped. As these are slowly withdrawn, a point is reached at which the reaction is just able to proceed. If pulled out farther the neutrons are able to multiply more rapidly and the pile operates at a higher power level. To stop the pile the absorbing rods are simply pushed back in further. Cadmium and boron-containing steel are suitable materials for the control rods.

The language of the preceding paragraph implies that the time scale is slow enough for an operator to maintain control by manual operation of the rods or by use of a similar slow-acting control mechanism. That is in fact the case owing to another phenomenon in the fundamental physics of fission—delayed neutrons.

It was discovered, in May 1942, that most but *not all* neutrons emitted in the fission process come out instantly. The uranium nucleus, in splitting apart, spills out some neutrons immediately, but the fragments of the split nucleus are in a highly unstable condition

and some of them throw out additional neutrons after a short delay, amounting on the average to half a minute. It is the delayed neutrons that set the time scale on which the neutron multiplication in the pile builds up, and set it at such a rate that slow-acting controls are easily able to regulate the activity of the pile.

The first pile was built on the University of Chicago campus during the fall of 1942. It contained 12,400 pounds of uranium, together with a graphite moderator. The original intention was to have it spherical in shape, but as the critical dimensions proved to be smaller than the original calculations indicated, the sphere was left incomplete, giving the actual pile the shape of a large inverted doorknob.

It was first operated on December 2, 1942, at a power level of one-half watt, and on December 12 the power level was stepped up to 200 watts, but it was not allowed to go higher because of inadequate provision for shielding personnel from dangerous radiations. Further studies on piles were made by the construction of one in Tennessee designed for 1,000-kilowatt level of operation. Later a pile using heavy water instead of graphite as moderator was built.

In summary, it should be remembered that although a pile is built with ordinary uranium, it is only the 0.7 percent of the metal, that is, U-235, that is active. The U-238 which constitutes most of the metal actually tends to stop the process. Only by ingenious lattice arrangement for slowing neutrons in a moderator is the pile able to operate in spite of the presence of the more prevalent U-238.

This means that, regarded as a fuel, only one one-hundred-fortieth of the total weight of uranium is being directly used; the rest is an inert material that remains largely untransformed by the pile.

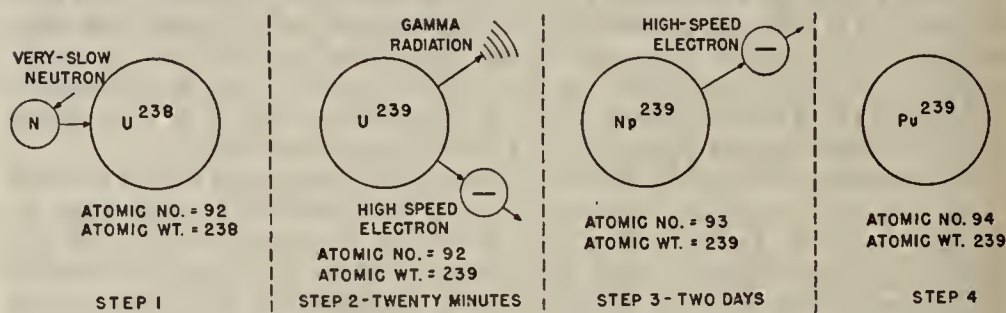
How does the bomb chain reaction differ from that in the pile?—The atomic bomb explodes, whereas the reaction in the pile proceeds in a slow way easily controlled by manual operation of absorbing rods. The fundamental difference is that the bomb (one type) is made of essentially pure U-235 without the use of a moderator. The chain reaction in such a bomb is carried on by fast neutrons directly released by fission. As already remarked, this cannot happen with ordinary uranium because the U-238 slows the neutrons to a very low energy level, at which point they cannot produce fission in U-235 but are absorbed by the U-238 without producing fission. With essentially pure U-235 these competing absorption processes do not occur and the reaction is carried by the fast neutrons directly emitted from a U-235 fission. These are utilized at once to produce fission in other U-235 atoms. Here the main factors tending to stop the reaction are the loss of neutrons through the surface (which sets a minimum size to the bomb) and losses by absorption by impurities, including any remaining U-238.

What is plutonium?—This is a newly discovered chemical element made from uranium by atomic transmutation. It exists in nature, if at all, only in the minutest quantities. Plutonium is important because, like U-235, it is a material from which atomic bombs can be made.

That U-238 can capture neutrons has already been mentioned as a phenomenon detrimental to the operation of a pile. This very detriment, however, is turned to constructive purpose in the production of plutonium. When U-238 captures a neutron, it becomes U-239 and emits gamma radiations as does radium. U-239 atoms

are not stable, having a mean life of only about 20 minutes, and emit high-speed electrons by a process of spontaneous radioactivity. By this activity they are transformed into atoms of essentially the same mass, but with one greater positive charge, 93, on the nucleus. Thus a new chemical element called neptunium is formed. Its symbol is Np-239.

Neptunium is also highly unstable with a mean life of only 2 days. Its atoms are spontaneously radioactive. Each atom emits a high-speed electron and by this process is transformed into an atom of a new element, plutonium, which has 94 positive charges on the nucleus, but retains the atomic weight 239. The physicist's symbol for plutonium is Pu-239.



Plutonium is made by a four-step process in which a U-238 atom absorbs a slow-moving electron. The product emits two electrons successively, resulting in a new man-made element of higher atomic number and mass than occurs in nature. Plutonium, like U-235, can break down in a chain reaction and be made to explode.

The piles erected by the Manhattan District project at Oak Ridge and Hanford were not intended to develop atomic power, but to produce the new element, *plutonium*, which provides a second material suitable for bombs. It is, in short, a competitor to U-235. The process by which plutonium is formed—capture of neutrons by U-238—tends, as previously emphasized, to stop the chain reaction in a pile. Nevertheless, the uranium lumps in the pile are exposed to a dense atmosphere of neutrons, and so the means is at hand for changing a part of the U-238 into Pu-239.

The several large piles put in operation generated heat equivalent to many hundreds of thousands of kilowatts. To utilize the heat would have required additional engineering in order to operate the pile at a high temperature, but in the atomic-bomb project there was not time for that.

A pile, when run at a high power level, also generates an enormous amount of radioactive material, far more potent than all the radium that was ever mined. To safeguard workers against the radiations from these materials, many operations must be performed by remote control. Since high standards of reliability and accuracy are essential throughout, the production of plutonium by this method becomes extremely complicated.

The plutonium is formed within the blocks of uranium inserted in the pile. These must be removed from the pile and the plutonium can then be extracted from the uranium by fairly simple chemical methods, since the two are entirely dissimilar elements.

How is U-235 separated from ordinary uranium?—In view of all the uncertainties involved in this separation, it was felt desirable to

develop several methods for extracting in almost pure form the 0.7 percent of U-235 contained in ordinary uranium.

The almost complete identity of all physical and chemical properties of two isotopes of the same element—in this case U-235 and U-238—makes this a particularly difficult problem. Several methods were tried, some of which, for a variety of reasons, were abandoned. The three methods carried from the research stage into actual production were (a) *the mass-spectrographic method*; (b) *the gaseous-diffusion method*; and (c) *the thermal-diffusion method*.

In addition to these three, a fourth, that of separating gaseous uranium compounds in large, high-speed centrifuges, was used, but only in the original model, or pilot, plant in Tennessee. The centrifuges operated on the same principle as cream separators on a dairy farm, depending for their results on the very slight difference in the masses of the two uranium isotopes.

The *mass-spectrographic method* was developed by the physicists of the radiation laboratory at the University of California during the year 1942. By January 1943 certain industrial firms were called in to design and manufacture the essential process equipment for the large production plant at Oak Ridge, Tenn. In this method the poles of an electromagnet are enclosed in a large vacuum chamber. Uranium is introduced in the form of a volatile compound into an arc discharge which breaks the compound down and ionizes the uranium atoms.

A large potential difference between the ion source and the tank pulls these ions through a slit in the source. Instead of moving straight across the tank, the ions are caused by the ordinary electrodynamic action of a magnetic field with a current (the current being moving charged ions) to move in circular paths. But the light ions move in a path of slightly smaller radius than the heavy ions. Therefore, separate receiver boxes can be placed at the appropriate places to catch the material of each kind.

Naturally, it is not as simple as this idealized description implies. The magnetic field must be exceedingly well regulated and the ripple in the high-voltage supplies must be exceedingly small, otherwise the ions will wander and either fail to be collected or get into the wrong receiver.

An interesting sidelight of this plant is that the many tons of conductor in the exciting coils of the electromagnets were made of silver—since the Federal Government had plenty of idle silver in its monetary reserves whereas copper was a critically short material during the war.

One of the most important features of the device is that the ion beam, in moving through the vacuum, ionizes some of the residual gas, providing free electrons that neutralize the space charge of the positive ion beam. This permits the use of beam currents which, although small, are nevertheless vastly greater than they would be if space charge were not neutralized. Without this feature the yield would be so low that this method in its present form would not be feasible.

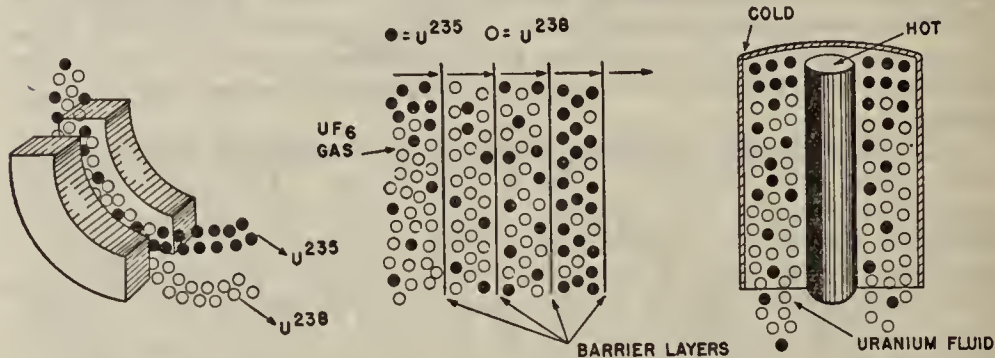
The *gaseous-diffusion method* requires the use of the uranium in the form of a volatile compound, UF_6 , the hexafluoride. When any mixed gas diffuses through a porous material, separation occurs because at a given temperature light molecules move more rapidly

than heavy molecules. However, there is only a very slight effect at a single passage through one sheet, or "barrier," of the porous material. Therefore, it is necessary to arrange for many successive fractionations, as in fractional distillation, at each of which only a small separating effect is obtained.

The impelling force causing the gas to flow through the barrier is, of course, a pressure drop that has to be made up by recompressing the gas in preparation for leakage through the next barrier. Because of the corrosive nature of the gas, and its great value after going partly through the plant, the design of these pumps presented many difficult engineering problems.

The problem of the barriers was itself of the utmost difficulty. This called for the mass production of many acres of barrier having microscopic passages of a kind that would resist corrosion and clogging up by the process gas.

The *thermal-diffusion method* is based on application of a curious and little understood physical phenomenon occurring in liquids as well as gases. In its barest essentials, thermal diffusion is this. Suppose we have either a mixture of gases or a mixture of two mutually



The small proportion of U-235 can be separated from the predominating U-238 in several ways, none of them easy. Three have been used on a large scale, and a fourth (mechanical centrifuge) successfully passed pilot-plant tests. By the mass-spectrometer method (left) the atoms are charged and passed through a magnetic field, causing them to take separate paths. In the gaseous-diffusion method (center) the light masses pass through a little more readily than the heavy ones. In the thermal-diffusion method (right) the lighter atoms tend to separate from the heavy ones under thermal action.

soluble liquids and put them in a container that is hot in one part and cold in another—arranging matters so the material is not stirred up by convection currents. Then, after a long time, it will be found that the material in the colder part is denser than that in the warm part. A gradual variation in composition will have arisen between the cold and the hot parts of the material to accompany the range in its temperature. An equilibrium is established in which a composition gradient accompanies the temperature gradient.

This, too, is a small effect and is useful only when an arrangement is made for achieving many successive fractionations so as to build up a large resultant separation. In this method the process gas or liquid is placed in a vertical tube, within which is placed another tube kept hot by any means while the outer tube is kept cool. Thus, a radial temperature gradient exists in the process fluid. This provides a means for separation, which is enhanced by the counter-current action due to convection as the hot fluid near the inner tube rises and the cold fluid near the outer tube descends.

By the spring of 1943, it was proved that this method could separate U-235 with an initial cost in time and money less than that of the other methods. The heat was provided by steam and the chief drawback was the enormous consumption of steam, so the thermal-diffusion plant, though relatively inexpensive to build, was rather expensive to operate.

As matters stand now, separation of U-235 from natural uranium is being done by production plants based on the three entirely different methods at the Government's reservation at Oak Ridge, Tenn.

And now the bomb!—Very little of this part of the story can be told as yet. Preliminary studies on this problem were made in 1941 and early 1942. At the end of the summer it was decided to concentrate all this work on a greatly expanded scale at a specially constructed laboratory at Los Alamos, N. Mex., about 40 miles northwest of Santa Fe. The first group of laboratory buildings, administrative buildings, homes for the personnel, and barracks for the soldier guards were built during the winter of 1942-43 and the scientific staff began to arrive and start work in April 1943. What these people achieved, starting with empty buildings on a remote mesa with only an old Diesel-driven mine generator as the laboratory power supply, thousands of miles from major industrial facilities and supplies, is an epic in the annals of science.

Although discussion of the bomb's details is not permitted, these essential points can be enumerated:

(a) The active material is either Pu-239 from the piles at Hanford, Wash., or U-235 from the three different separation plants at Oak Ridge, Tenn.

(b) A bomb less than the critical size will not explode at all, so it is not possible to experiment with little ones to learn how to make a big one.

(c) Before firing, the active material must be kept separated into two or more lumps, each of subcritical size. The act of firing consists of assembling these rapidly into a mass that is above critical size.

(d) This must be done with great rapidity, using a firing mechanism, itself a difficult problem. The need for rapidity arises from the fact that if the parts come together slowly an explosive reaction begins before the parts are completely together. This would blow them apart again and stop the fission chain reaction with only an insignificant release of the atomic energy.

(e) Even with the best design possible, the stopping of the reaction due to the bomb's blowing itself apart was expected to prevent the effective conversion by fission of all the material in the bomb. Some estimates placed this conversion efficiency as low as a few percent. What was actually attained at the Alamogordo, N. Mex., tests has not been disclosed to date.

(f) The fission products are extremely radioactive and if all of them were to remain in a relatively small area (say a square mile) the radiations would be too intense to permit the existence of any living matter in the region for probably several weeks after the explosion.

(g) To get maximum destructive effect from the blast the bomb is fired while at a considerable height above ground, which also favors the dispersal over a wide area of the radioactive products,

so that the contamination of the area is not thought to be an important attribute of the weapon.

What of the future?—While no reputable scientist ever makes definite promises about anything that lies in the future, still it is possible to venture an opinion that the following significant developments are highly likely to be made within the coming decade:

(a) More effective ways of producing U-235 and Pu-239 will be developed, permitting greater production at lower cost.

(b) These materials, in combination with ordinary uranium, will make possible power-producing piles of smaller size than those thus far developed.

(c) Piles will have important peacetime uses as special-purpose energy sources, and as sources of neutrons and radioactive materials for medical and other scientific work.

(d) Piles will probably not be developed into small power units for automobiles or airplanes because of their over-all weight, including that of the material needed to shield the passengers from the dangerous radiations. Also, because of shielding difficulties, piles will probably not provide the driving power for railroad locomotives. However, it is reasonable to suppose that within a decade some ships may derive their power from piles.

(e) Although atomic energy may seem strange and mysterious, it will find its application in the power field as a source of heat. The fission chain reaction makes the pile get hot. Some heat exchanger fluid must go through the pile to get out the heat. The hot fluid will then be directly used as the working fluid in a standard heat engine; e. g., a steam turbine, possibly of special design. In other words, the pile is a new kind of boiler, and however mysterious it may seem now, it will not require a revolution in the well-known engineering practice by which heat is converted into mechanical effort and thence into electrical power.

It is known that fission may also be produced in thorium, which is much more abundant in nature than uranium, and, therefore, may be the fuel used in piles of the future. Whether release of atomic energy from other materials can be achieved is a question which can be decided only by research. At present, no means of doing this are in sight, but it should be remembered that the atomic bomb would have seemed fantastic to the best nuclear physicists in 1938. In the meantime, the most urgent problem is that of international arrangements which will assure that atomic power will be used for peaceful purposes only.

It was felt by those at Alamogordo that there was brought into being something big and something new that will prove to be immeasurably more important than the discovery of electricity or any of the other great discoveries which have so affected our existence.³

³ From the Smyth report.

NOTE ON URANIUM ORES

Although uranium is contained in over 100 minerals, only two—pitchblende and carnotite—are of importance. It is estimated that uranium is present in the earth's crust in the proportion of about four parts per million. Early rough estimates were that the nuclear energy available in known world deposits of uranium is adequate to supply the total power needs of this country for 200 years (assuming utilization of U-238 as well as U-235).

Pitchblende occurs in metalliferous veins, found in Bohemia and Saxony. More recently, deposits have been found in the Belgian Congo and the Great Bear Lake region of northern Canada. Most of the importations to this country during 1942 and 1943, the last years for which data are available, were from Canada and the Belgian Congo.

Pitchblende of good quality contains as much as 80 percent of uranoso-uramic oxide (U_3O_8). It is a brown to black ore with pitch-like luster in the form of crystallized uraninite. Madame Curie was among the first to recognize this material as a source of radium.

Carnotite, the second main source of uranium, has been discovered in Arizona, Colorado, and Utah. It is found as a canary yellow impregnation in sandstone. Production of this ore climbed steadily during the middle thirties from a low of 254 short tons in 1934 to a high of 6,256 in 1939. The actual pounds of uranium extracted from the ore produced in 1939 were 59,269. The actual extent of deposits has not been divulged.

Until recently, the only use for uranium was as a coloring agent for ceramics and glass. It was used in amber signal lenses and in glass with a special coefficient of expansion for glass-to-metal contacts in radio tubes.

III. BRITISH STATEMENTS RELATING TO THE ATOMIC BOMB¹

STATEMENTS BY PRIME MINISTER ATTLEE AND WINSTON CHURCHILL
ISSUED AUGUST 6, 1945

STATEMENT BY THE PRIME MINISTER

1. Everybody will have seen the important statements which have been made by President Truman and by Mr. Stimson, the United States Secretary for War, about the atomic bomb. The problems of the release of energy by atomic fission have been solved and an atomic bomb has been dropped on Japan by the United States Army Air Force.

2. President Truman and Mr. Stimson have described in their statements the nature and vast implications of this new discovery. Some account is now required of the part which this country has played in the remarkable scientific advances which have now come to fruition. Before the change of government Mr. Churchill had prepared the statement which follows, and I am now issuing it in the form in which he wrote it.

STATEMENT BY MR. CHURCHILL

3. By the year 1939 it had become widely recognized among scientists of many nations that the release of energy by atomic fission was a possibility. The problems which remained to be solved before this possibility could be turned into practical achievement were, however, manifold and immense, and few scientists would at that time have ventured to predict that an atomic bomb could be ready for use by 1945. Nevertheless, the potentialities of the project were so great that His Majesty's Government thought it right that research should be carried on in spite of the many competing claims on our scientific manpower. At this stage the research was carried out mainly in our universities, principally Oxford, Cambridge, London (Imperial College), Liverpool, and Birmingham. At the time of the formation of the coalition government, responsibility for coordinating the work and pressing it forward lay in the Ministry of Aircraft Production, advised by a committee of leading scientists presided over by Sir George Thomson.

4. At the same time, under the general arrangements then in force for the pooling of scientific information, there was a full interchange of ideas between the scientists carrying out this work in the United Kingdom and those in the United States.

5. Such progress was made that by the summer of 1941 Sir George Thomson's committee was able to report that, in their view, there was a reasonable chance that an atomic bomb could be produced

¹ This chapter is a reprint of a pamphlet entitled "Statements Relating to the Atomic Bomb," published by the British Government, His Majesty's Stationery Office, London, 1945. Price 4d.

before the end of the war. At the end of August 1941 Lord Cherwell, whose duty it was to keep me informed on all these and other technical developments, reported the substantial progress which was being made. The general responsibility for the scientific research carried on under the various technical committees lay with the then Lord President of the Council, Sir John Anderson. In these circumstances (having in mind also the effect of ordinary high explosive which we had recently experienced), I referred the matter on August 30, 1941, to the Chiefs of Staff Committee in the following minute:

General Ismay for Chiefs of Staff Committee.

Although personally I am quite content with the existing explosives, I feel we must not stand in the path of improvement, and I therefore think that action should be taken in the sense proposed by Lord Cherwell, and that the Cabinet Minister responsible should be Sir John Anderson.

I shall be glad to know what the Chiefs of Staff Committee think.

The Chiefs of Staff recommended immediate action with the maximum priority.

6. It was then decided to set up within the Department of Scientific and Industrial Research a special division to direct the work, and Imperial Chemical Industries, Ltd., agreed to release Mr. W. A. Akers to take charge of this Directorate, which we called, for purposes of secrecy, the Directorate of Tube Alloys. After Sir John Anderson had ceased to be Lord President and became Chancellor of the Exchequer, I asked him to continue to supervise this work, for which he has special qualifications. To advise him, there was set up under his chairmanship a consultative council composed of the president of the Royal Society, the chairman of the Scientific Advisory Committee of the Cabinet, the Secretary of the Department of Scientific and Industrial Research, and Lord Cherwell. The Minister of Aircraft Production, at that time Lord Brabazon, also served on this committee. Under the chairmanship of Mr. Akers there was also a technical committee on which sat the scientists who were directing the different sections of the work, and some others. This committee was originally composed of Sir James Chadwick, Professor Peierls, and Drs. Halban, Simon, and Slade. Later it was joined by Sir Charles Darwin and Professors Cockcroft, Oliphant, and Feather. Full use was also made of university and industrial laboratories.

7. On October 11, 1941, President Roosevelt sent me a letter suggesting that any extended efforts on this important matter might usefully be coordinated or even jointly conducted. Accordingly, all British and American efforts were joined and a number of British scientists concerned proceeded to the United States. Apart from these contacts, complete secrecy guarded all these activities and no single person was informed whose work was not indispensable to progress.

8. By the summer of 1942 this expanded program of research had confirmed with surer and broader foundations the promising forecasts which had been made a year earlier, and the time had come when a decision must be made whether or not to proceed with the construction of large-scale production plants. Meanwhile, it had become apparent from the preliminary experiments that these plants would have to be on something like the vast scale described in the American statements which have been published today.

9. Great Britain at this period was fully extended in war production and we could not afford such grave interference with the current

munitions programs on which our warlike operations depended. Moreover, Great Britain was within easy range of German bombers, and the risk of raiders from the sea or air could not be ignored. The United States, however, where parallel or similar progress had been made, was free from these dangers. The decision was therefore taken to build the full-scale production plants in America.

10. In the United States the erection of the immense plants was placed under the responsibility of Mr. Stimson, United States Secretary of War, and the American Army administration, whose wonderful work and marvelous secrecy cannot be sufficiently admired. The main practical effort and virtually the whole of its prodigious cost now fell upon the United States authorities, who were assisted by a number of British scientists. The relationship of the British and American contributions was regulated by discussion between the late President Roosevelt and myself, and a Combined Policy Committee was set up.

11. The Canadian Government, whose contribution was most valuable, provided both indispensable raw material for the project as a whole, and also necessary facilities for the work of one section of the project which has been carried out in Canada by the three Governments in partnership.

12. The smoothness with which the arrangements for cooperation which were made in 1943 have been carried into effect is a happy augury for our future relations and reflects great credit on all concerned—on the members of the Combined Policy Committee which we set up; on the enthusiasm with which our scientists and technicians gave of their best—particularly Sir James Chadwick, who gave up his work at Liverpool to serve as technical adviser to the United Kingdom members of the Policy Committee and spared no effort, and not least, on the generous spirit with which the whole United States organization welcomed our men and made it possible for them to make their contribution.

13. By God's mercy, British and American science outpaced all German efforts. These were on a considerable scale, but far behind. The possession of these powers by the Germans at any time might have altered the result of the war, and profound anxiety was felt by those who were informed. Every effort was made by our intelligence service and by the Royal Air Force to locate in Germany anything resembling the plants which were being created in the United States. In the winter of 1942-43 most gallant attacks were made in Norway on two occasions by small parties of volunteers from the British Commandos and Norwegian forces, at very heavy loss of life, upon stores of what is called heavy water, an element in one of the possible processes. The second of these two attacks was completely successful.

14. The whole burden of execution, including the setting up of the plants and many technical processes connected therewith in the practical sphere, constitutes one of the greatest triumphs of American—or indeed human—genius of which there is record. Moreover, the decision to make these enormous expenditures upon a project which, however hopefully established by American and British research, remained nevertheless a heartshaking risk, stands to the everlasting honor of President Roosevelt and his advisers.

15. It is now for Japan to realize, in the glare of the first atomic bomb which has smitten her, what the consequences will be of an

indefinite continuance of this terrible means of maintaining a rule of law in the world.

16. This revelation of the secrets of nature, long mercifully withheld from man, should arouse the most solemn reflections in the mind and conscience of every human being capable of comprehension. We must indeed pray that these awful agencies will be made to conduce to peace among the nations, and that instead of wreaking measureless havoc upon the entire globe, they may become a perennial fountain of world prosperity.

STATEMENT BY THE DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL
RESEARCH, ISSUED AUGUST 12, 1945

I. INTRODUCTION

1. The Prime Minister has issued a statement describing the events leading up to the production, in the United States, of atomic bombs and the dropping, by the United States Army Air Force, of the first of these on Japan. Statements have also been made by President Truman and Mr. Howe. Further statements have been issued by the United States and Canadian Governments giving an account of the work carried out in their respective countries which led up to or was associated with this remarkable achievement. These supplementary statements also give an outline of the scientific background without which it is impossible to appreciate the great advance which has been made.

2. The following official statement has been prepared to fulfill a similar purpose in this country. It begins with a very brief account of the outstanding discoveries in that branch of physics known as nuclear physics, which by the year 1939 had led scientists to the belief that it should be possible to find a way of releasing atomic energy on a significant scale and under controlled conditions. It will be seen that scientists of many countries shared in this development and that the contribution of British laboratories was outstanding.

3. There follows an account of the examination of the problem in this country from the beginning of 1940 to the middle of 1941, when a scientific committee reported that there was a good chance that atomic bombs could be produced in time for use in the war. The next section of the statement deals with the organization of the work in this country and with the scope of the research programs undertaken. Reference is made to the interchange of information with the corresponding United States organization and to the decision, already referred to in the Prime Minister's statement, that full-scale plants for the production of atomic bombs should be built not in this country but in the United States of America. There is a short reference to the decision to transfer to Canada one section of the work. This was at first a joint Anglo-Canadian project, but became later, with the co-operation of the United States Government, a tripartite enterprise.

4. In the Prime Minister's statement there is a reference to the setting up in Washington, after discussions between President Roosevelt and Mr. Churchill, of a Combined Policy Committee. This committee accepted certain recommendations from its scientific advisers for a closer integration of the scientific work, which involved the transfer to United States of America and Canada of many of the

scientists working on this project in the United Kingdom. The present statement ends with a note on the effect of this on the British programs.

5. This statement is intended to be read in conjunction with the American and Canadian statements. It is, therefore, confined as far as possible to work in the United Kingdom and to the share taken by British scientists in the American and Canadian projects. Consequently no reference is made to the gigantic scale of the American scientific and technical effort, the successful outcome of which constitutes, as Mr. Churchill has already said, one of the greatest triumphs of human genius of which there is record.

II. HISTORICAL SURVEY

6. The discovery of the fission of uranium and its application in the atomic bomb is no isolated event, but follows a series of discoveries which since the end of last century have been the basis of the modern science of physics. This work has been done in many countries and is the result of full and free collaboration between scientists, among whom those working in Britain have played a most important part.

7. Classical ideas on the nature and properties of matter culminated in the atomic theory of the nineteenth century. It was accepted that all matter was made up of discrete, indestructible particles, or atoms, which were classified into 92 different species or elements. From the atoms of one or more of these elements all the different chemical compounds that exist in nature are built up. But it was regarded as a cardinal point that the atoms of any one element could in no way be changed or converted into those of another.

(a) *Radioactivity*

8. The fundamental break with this theory occurred when the French physicist, H. Becquerel, in 1896, discovered that one of the elements—uranium—was continuously emitting radiation of an unknown type which could penetrate matter and affected a photographic plate. Further study of this new-found property of uranium led to the isolation of another element—radium—from the uranium deposits in Joachimstal by Pierre and Marie Curie in 1898. Radium showed, to a much greater degree, this same property of emitting radiation and it was clear that the phenomenon of radioactivity, as it was called, was altogether different from those associated with normal chemical reactions between atoms. In 1902 Rutherford and Soddy, who were then working at McGill University, Montreal, suggested that it could only be explained by the assumption that the atoms of uranium, radium, and other radioactive elements which had by then been discovered, were unstable and were continuously breaking up at rates which were characteristic for each element.

9. This suggestion was conclusively proved by detailed experimental work, in the course of which the nature and properties of the radiation from radioactive elements were discovered. Part of this radiation, the so-called alpha rays, consists of helium atoms, carrying a positive charge of electricity, and these were found to be of the greatest value as a tool for further exploration of the structure of atoms.

10. It was, in fact, research on the penetration of matter by alpha rays which led Rutherford, at Manchester University in 1911, to the

fundamental discovery that the whole mass of each atom was concentrated in a minute central nucleus which carried a positive electric charge. Round this nucleus, but at relatively very great distances, revolved elementary negative electric charges—the electrons—in numbers sufficient to neutralize exactly the positive charge of the nucleus. The mass of these electrons was negligible compared with that of the nucleus. In terms of classical electromagnetic theory, however, such a system would be unstable and the energy of the revolving electrons would in a very short time be lost as radiation. Niels Bohr, of Copenhagen, put forward a theory in 1913, which combined Rutherford's model of the nuclear atom with the quantum theory of energy which had been enunciated by Planck, to explain limitations of the classical electromagnetic theory.

11. The resulting Rutherford-Bohr model of the atom proved to be of the greatest value in explaining the results of experimental work in every branch of physics and, in particular, the relationship between the different elements as regards their ordinary physical and chemical properties. These are determined entirely by the electrons revolving round the nucleus and are therefore practically independent of the mass of the nucleus. It was, therefore, immediately understood that any element, with a given charge on the nucleus, could exist in more than one modification with different atomic masses but almost identical physical and chemical properties.

12. The existence of such modifications of any element, which were known as isotopes, had first been suggested by Soddy in 1910 as a result of studies of the decay products of the natural radioactive elements. Aston, at Cambridge, followed up work, which had been started by J. J. Thomson and developed the so-called mass-spectrograph, which subjected a stream of electrically charged atoms, or ions, to a crossed electric and magnetic field and brought those of different mass to a focus at different points. It was proved, with the help of this instrument, that the great majority of elements consisted of a mixture of two or more isotopes, and that the relative weight of the atom of any given isotope of any element was very nearly a simple multiple of the weight of a hydrogen nucleus, or proton.

13. Because the isotopes of an element have almost identical chemical properties it is in general extremely difficult to separate them or even to change appreciably their relative concentration. We must take recourse to processes which depend on the nuclear mass of the atoms, making use of the difference in mass between isotopes. This difference is usually only a small fraction of the total mass. Moreover, while some of these methods, such as that used in the mass-spectrograph, are not difficult to apply, they can ordinarily deal only with very small quantities of material too small to be of much practical use. In 1932 Urey and Brickwedde of Columbia University, New York, showed that hydrogen itself is not a simple element but contains a small amount (about one five-thousandths) of an isotope known as heavy hydrogen, or deuterium, which has almost double the mass of a proton. Because, in this case, the ratio of the masses of the isotopes is as 2 to 1, the physical and chemical properties of hydrogen and deuterium are sensibly different and it was found possible to separate them, in a pure state, in large amounts by normal technical methods.

14. The atoms of nearly all the elements are stable and it is only in the case of the radioactive elements that spontaneous disintegration of the nucleus takes place. Although it was known that when this occurred energy was released, atom for atom, on a scale incomparably greater than that connected with any known chemical reaction, it was recognized to be of no practical use because the rate of decay can in no way be influenced and it was obvious that any hope of understanding the conditions which might make such influence possible would depend on an understanding of the structure of the atomic nucleus.

(b) Artificial disintegration of atoms

15. The first decisive step in the solution of this problem was taken by Rutherford who in 1919 showed experimentally that the charged alpha particles from radium-C could, in rare instances, collide with the nucleus of an atom of the common element nitrogen in such a way that it broke up and, as a result of the collision, the nuclei of two other atomic species or elements (oxygen and hydrogen) were formed.

16. While the discovery of radioactivity had shown that some of the elements could, spontaneously, break up to form other elements, Rutherford had now shown that the particles emitted in this process could be used to break up, or transmute, the atoms of other elements which were normally stable.

17. This development was pursued in the following years by Rutherford and Chadwick, who found that many other light elements could be transmuted in a similar way. In each case a proton was ejected, and generally the process of transmutation was accompanied by the release of a considerable amount of energy. It thus appeared that the proton was a common constituent of atomic nuclei and one of the fundamental particles of which matter is built up. Moreover, the release of energy in these processes was a further indication of the store of energy resident in atomic nuclei.

18. In parallel with this development, Rutherford, with Chadwick and other colleagues and students of the Cavendish Laboratory, attacked many other questions concerning the properties of atomic nuclei and their structure, laying the experimental foundations of a whole new branch of physics, now known as nuclear physics, arising from Rutherford's discoveries, first of the nature of the phenomenon of natural radioactivity; secondly, of the existence of the atomic nucleus; and thirdly, that some nuclei could be transmuted by bombardment with alpha particles.

19. A further very important step was taken here in 1932 when Cockcroft and Walton carried out an experiment in which hydrogen nuclei, produced artificially in an electric discharge and accelerated to a high velocity by means of an applied voltage, were used to bombard another stable element, lithium. The atoms of this element were found to disintegrate and transmutation, the dream of the alchemists, had been achieved in a completely controlled laboratory experiment.

20. In this transmutation, and in others which followed this new discovery, the release of energy was enormous for such a minute event as a reaction involving a single nucleus. Nevertheless, the number of nuclear reactions was so small that the amount of energy generated by the reaction was extremely small compared with the total input of energy used to produce the bombarding particles. The practical value

of these nuclear reactions as a source of energy was still completely negligible.

21. The reason is not far to seek; not only are these nuclear reactions very rare events, but the reactions are not self-propagating. This is quite different from the chemical reactions with which we are familiar in our daily life, such as the combustion of coal or oil. Once started, these propagate themselves and the reactions develop and spread, involving the whole bulk of material: thus the lighting of a fire releases enough heat to ignite the neighbouring fuel, which in turn releases more heat to ignite more fuel, and so on. This is not the case for the nuclear reactions which have so far been mentioned; the particles which are formed in them are insufficient to affect neighbouring nuclei so as to maintain the reaction and propagate it. It is clear that if we wish to tap the hidden reserves of energy in atomic nuclei and put them to practical use we must find a reaction which can propagate itself; for example, a reaction in which particles are emitted of the same kind that initiated it and in sufficient numbers to affect neighbouring nuclei, which in their turn emit new particles to react with other nuclei, thus beginning a chain reaction which spreads through the whole mass.

22. It is convenient at this point to consider the form of this reserve of energy in atomic nuclei. As long ago as 1905 Einstein showed that, according to the theory of relativity, there is no essential difference between mass and energy, but that energy has mass and mass represents energy. For many years the proof that energy and mass were equivalent depended on indirect, although conclusive, evidence. The reason for this lack of immediate evidence is the extreme size of the ratio between mass and energy. A very small mass corresponds to a very large amount of energy. For example, a mass of one ounce transformed entirely into heat energy would be sufficient to convert nearly a million tons of water into steam. The fantastic size of the figure for conversion of mass to energy explains why a loss of mass has never been observed in ordinary chemical processes; the heat given off in combustion has, we believe, mass associated with it, but its amount is so small that it cannot be detected by the most sensitive balance.

23. Very striking and direct evidence for the equivalence of mass and energy was furnished by the experiments on the artificial transmutation of atoms. It was shown that in these nuclear reactions a release of energy was always accompanied by a decrease of mass and that the equivalence between mass and energy was exactly as predicted by Einstein. It thus appears that in these nuclear reactions matter is being partially converted into energy and that the reserve of energy of the atomic nucleus is hidden in the most obvious place, its own mass. There is, therefore, a store of energy resident in matter which is enormously greater than that available to us from any known chemical process. It is clear that since no such extraordinary sources are known on this earth there can be no appreciable conversion of matter into energy. On the other hand, it is now generally accepted that it is this store of energy in matter itself which maintains the heat of the sun and of other stars through a cycle of nuclear changes in which matter is converted into energy.

24. In the newly discovered reactions involving atomic nuclei rather than the outer screen of electrons, there was an enormous release of

energy of this type for each atom that was successfully bombarded. The scientific importance of the results was immense but the apparent practical value was still negligible because only one successful collision could be obtained in many thousands and the total input of energy in producing the bombarding particles was far greater than the energy release from the very few successful collisions.

25. This low efficiency is, in part, due to the very small size of the nucleus compared with that of the atom as a whole. The massive central nucleus of an atom, with its surrounding cloud of electrons, has often been compared with the sun in the planetary system and a direct collision between the bombarding particle and the nucleus, which would be needed to break up the latter, is an inherently improbable event. But when both the nucleus and the bombarding particle are positively charged there will be a force of repulsion between them which will greatly lessen the chance of a direct collision. Only particles of very high energy can overcome this force and nearly all the bombarding particles will lose their energy in collisions with the electrons surrounding the atomic nuclei before they have a chance of reaching the nucleus itself.

(c) *Discovery of the neutron*

26. In 1932 Chadwick, working in the Cavendish laboratory, made a discovery of fundamental importance. The observation was first made by Bothe and Becker in Germany that, when the element beryllium was bombarded with the alpha particles emitted by polonium—a natural radioactive element—a very penetrating radiation was emitted. Joliot and his wife, Irene Curie-Joliot, in Paris, carried these observations further and finally, as a result of detailed measurements of the masses and energies of recoil particles, Chadwick was able to prove that this apparent radiation consisted of fundamental particles which had a mass almost the same as that of a proton, but had no electric charge. These new-found particles were called neutrons, and it was at once realized that they, together with protons, were likely to be the ultimate constituents of the nuclei of atoms of all elements. The nucleus of any atom could be built up from the number of protons required to give the observed positive electric charge, together with the additional number of neutrons to bring the nuclear mass up to the observed value.

27. The discovery of the neutron was, however, of even greater practical importance in that its lack of electric charge made it an ideal projectile for carrying out nuclear transformations. The use of neutrons as a means of exploring the structure and reactions of atomic nuclei was taken up vigorously in physics laboratories throughout the world. Neutron sources could be made either by mixing radium or polonium with beryllium so as to take advantage of the nuclear reaction already mentioned or by the use of an instrument known as the cyclotron, which had been developed by E. O. Lawrence, of the University of California, Berkeley. This instrument has been of very great value in the production of high-energy beams of charged atoms or nuclei and many nuclear reactions which could be carried out with such beams were found to produce neutrons.

28. In the meantime an important contribution to the rapid advance in the new science of nuclear physics was made by Joliot and Mme. Irene Curie-Joliot, who, in 1933, showed that certain elements, which

are normally stable, undergo nuclear reactions when bombarded by alpha rays and yield new atomic nuclei which are isotopes of known elements but which are not stable and decay in the way characteristic of the natural radioactive elements. This decay was associated with the emission of beta rays, which, since the early work on radioactivity, had been recognized as being negatively charged electrons whose mass is negligible compared with those of either the proton or the neutron. In any radioactive series the emission of an electron, while leaving the atomic mass number unchanged, results in the increase, by one unit, in the net positive charge of the nucleus.

29. In 1934 E. Fermi and the school of physicists then working with him at Rome began an intensive study of the reactions produced when the nuclei of all atomic species were subjected to neutron bombardment. In the course of this work the heaviest known elements were examined and, in particular, uranium—with the atomic number 92—was subjected to neutron bombardment. The results of this work showed that new isotopes were formed which were unstable and were subject to radioactive decay. It therefore seemed that, by bombardment of the heaviest known atom with neutrons, it was possible to produce in the laboratory atoms of higher atomic number, 93 and upward, than were found in nature.

30. Further experimental work, however, led to certain difficulties in this explanation and it was found to be impossible to account for the existence, in the normal arrangement of atomic species, of the very large number of so-called transuranium elements that were discovered. At this time it was generally accepted that these new elements were all, in fact, of higher atomic number than uranium, and elaborate chemical tests had proved that they certainly could not be identified with any of the elements immediately below uranium in atomic number or weight.

(d) Discovery of fission

31. Professor O. Hahn and Dr. Strassmann, in Berlin, became interested in this problem at the end of 1938 and, from the particular point of view of their chemical nature, carefully reexamined the new elements. In January 1939 they published a most important paper in which they reported positive chemical evidence to show that one, at least, of the new isotopes which were believed to be of higher atomic number and mass than uranium was, in fact, an isotope of the element barium which has an atomic number and mass not very different from half that of uranium.

32. Immediately afterward Dr. O. Frisch and Prof. Lise Meitner pointed out that this discovery could only mean that when uranium was bombarded by neutrons a nuclear reaction took place of a kind utterly different from any so far studied and that the uranium nucleus split into two parts of roughly equal mass. This phenomenon, for which they proposed the name "nuclear fission," could be explained in terms of the theory of nuclear reactions which had been developed by Professor Bohr in the preceding years. They also pointed out that the fragments of the uranium nucleus would fly apart with great energy and this prediction was given a direct proof by experiments carried out by Dr. Frisch in Copenhagen. Confirmation of the reality of the fission process with uranium, and of the great energy release which accompanied it, was obtained by Professor Joliot in

Paris independently (and at nearly the same time) and by other physicists throughout the world as soon as the original work was known to them.

33. Very shortly afterward, in the spring of 1939, Professor Joliot and his collaborators, Drs. Halban and Kowarski, gave an experimental proof of the additional fact, which was expected on theoretical grounds, that when the fission of uranium takes place a number of free neutrons is also produced. Their first experiments showed this number to be about 3. Experiments of the same types were carried out by Drs. Anderson, Fermi, Hanstein, Szilard, and Zinn in the United States of America, and independent confirmation was obtained of the fact that more than one free neutron is produced for each fission of a uranium nucleus.

34. It was immediately recognized that this discovery was of the very greatest significance and that, for the first time, there was an experimental basis for the hope that the useful realization of the enormous store of atomic energy in matter could be achieved. Not only did the fission reaction provide the large amount of energy that was calculated from the difference in mass of the reactants and products, but the liberation of more than one new neutron each time that a uranium nucleus underwent fission made possible the continuation of the reaction by the development of a chain process, once the initial step had been taken. Such a chain process would enable the reaction, in a suitable mass of uranium, to take place at an ever-increasing rate and would involve so many atoms that there would be a sensible and, indeed, possibly an overwhelming liberation of energy. The whole process could, furthermore, be started by the application of only a minute fraction of the energy that would be liberated and the difficulty hitherto encountered in nuclear reactions of obtaining an over-all gain in energy would be eliminated.

35. It was therefore only natural that there should be an outburst of activity in most of the physics laboratories of the world with a spate of publications in the scientific press. This continued until the outbreak of war, when an increasing sense of the great potential value of this work imposed restrictions.

36. Certain important facts emerged from the work that was published during this period, and theoretical conclusions and expectations were announced, but it is hardly possible to give any strictly chronological account of them. The work was done in so many laboratories and the results, sometimes in a very preliminary form, were communicated to so many journals and published at such varying intervals after communication that details of priority cannot be clearly settled. But reference should be made to the visit which Professor Bohr paid to the United States of America from January till May 1939. He was able to report directly to American physicists the experiments carried out by Hahn, Frisch, and Meitner, and their suggested interpretation of the results. In addition, while in the United States of America, Bohr developed and published, in collaboration with Prof. J. A. Wheeler, of Princeton University, New Jersey, a theory of the fission process.

37. One important prediction which was made from this theory related to the different behavior of the various isotopes of uranium. This element consists, for much the greater part (99.3 percent), of atoms of mass number 238, but there is also an isotope (0.7 percent)

of mass 235, and a very small proportion (0.008 percent) of an isotope of mass 234. The first two, which are conveniently designated by the symbols U-238 and U-235, respectively, are the most important in connection with the uranium fission project. Bohr predicted, in February 1939, that the common isotope, U-238, would be expected to undergo fission only when the bombarding neutrons had a high energy, but that the rarer U-235 isotope would behave differently in that it would not only show this reaction with high-energy neutrons but in addition would be particularly liable to undergo fission when the energy, and therefore the velocity, of the bombarding neutrons was very low. This prediction was, in fact, confirmed in March 1940 by experiments carried out by Nier, of Minnesota, and Booth, Dunning, and Grosse of Columbia University, New York. They used a sample of uranium in which the content of U-235 had been increased above the normal value by means of Nier's mass-spectrograph.

38. It is relevant, at this point, to refer to a different phenomenon shown by the U-238 isotope when bombarded by neutrons of one rather narrowly defined energy value which is intermediate between the very high energy required to cause fission of this isotope and the very low energy which is most effective in causing fission of U-235. Neutrons which have this so-called resonance energy are very strongly absorbed by the U-238 nucleus, but fission does not follow. Instead, the new nucleus, which now has a mass number 239, emits two electrons in successive steps and is thereby converted first to an isotope of an element with atomic number 93 (for which the name, "neptunium," has been suggested) and then to one of an element with atomic number 94. This latter has provisionally been named "plutonium," and the isotope formed from U-238 after resonance capture of a neutron may be represented by the symbol Pu-239. Neptunium and plutonium are true transuranium elements of the type suggested by Fermi, and are not found in nature. Of the two, Pu-239 is of particular interest in connection with the general problem of fission and the release of atomic energy because it could be expected, from the Bohr-Wheeler theory, to show the same sort of properties as U-235 and to be capable of undergoing fission with the greatest ease when bombarded by neutrons of very low energy.

39. Reference must also be made to the fact that the three nuclear species U-235, U-238, and Pu-239 are not the only ones that can undergo fission. The two elements next below uranium in the atomic series were also shown to have this same property. Thorium, with atomic number 90 and consisting of one isotope only of atomic mass 232, behaves in the same way as U-238, and fission can only be brought about when the bombarding neutrons have very high energy. The very rare radioactive element protactinium, with atomic number 91 and atomic mass 231, behaves, as regards fission, in a manner intermediate between U-235 and U-238. These facts, again, are all explicable in terms of the Bohr-Wheeler theory, which enumerates certain general rules covering the behavior to be expected with regard to fission of any heavy nucleus, known or unknown.

(e) Chain reaction and the atomic bomb

40. The foregoing survey of the development of atomic and nuclear physics, though necessarily brief and incomplete, has traced the growth of the idea that there are enormous reserves of energy in all

matter; that these are of a nature quite different from those involved in chemical processes, such as the burning of coal or oil or the detonation of TNT or other explosives; and that the nuclear reactions by which they are released are more comparable to those occurring in the sun or stars or in the natural radioactive elements found on the earth.

41. While this idea has been formed and steadily strengthened since the discovery of the phenomenon of radioactivity at the end of last century, it is only since the discovery, reported at the beginning of 1939, of the special phenomenon of fission that a way has been clearly seen by which this atomic or nuclear energy in matter could be released, controlled, and put to use by man.

42. In recent years the enormous effort expended on the solution of this problem, practically all of which has been borne by the United States of America, has been concentrated on the development of an atomic bomb. Considerations of security make it impossible to disclose many of the details of this work, but in what follows some indication is given of the share in it which has been carried out in Britain. Before doing this, however, it may be worth summarizing the nature of the problems relating to the use of fission, either to produce a violent explosion or to liberate atomic energy under controlled conditions, as they appeared when the work was organized, with a new sense of its urgency and importance, at the beginning of the war.

43. It was generally accepted that a chain reaction might be obtained in uranium which would yield enormous amounts of energy. This, on a basis of equal weights, would be millions of times greater than that produced by the combustion of coal or oil. But it was realized that, if this chain reaction was to be divergent and self-sustaining, certain critical conditions must be satisfied. In the first place, the system as a whole must be of such a size that there was not too great a probability that neutrons produced in the fission process would escape from the system and so be unable to take any further part in the chain process. Secondly, the system must not contain more than a limited amount of material that would absorb neutrons and in this way, again, remove their chance of contributing to the divergent fission chain reaction. Thirdly, the fact was appreciated that, if the reaction was not to "run away," it was essential to make use of neutrons of very low energy in the individual steps of the chain process. Only then would it be possible to introduce methods which would allow the rate of development of the process to be controlled. The neutrons produced when fission occurs have very high energies, but this is dissipated as a result of elastic collisions with the nuclei of other atoms that may be present. Professor Joliot and his coworkers in Paris, Professor Fermi and other physicists in the United States of America, and Prof. Sir George Thomson and his colleagues in London, were giving thought to the possibility of using a mixture of uranium and some suitable slowing-down medium arranged in such a way that the fast neutrons produced by fission would lose their energy by elastic collisions before initiating further fission in the uranium. A suitable slowing-down medium must, above all, not have any large probability of capturing a neutron, and its atoms should be of as small mass as possible in order to get the maximum rate of loss of energy in the neutrons through elastic col-

lisions. The most suitable materials to fulfill both these conditions were heavy hydrogen or its compound, heavy water, helium, beryllium, and carbon.

44. At the beginning of 1940, Dr. Frisch and Professor Peierls, of Birmingham University, and Prof. Sir James Chadwick, of Liverpool University, independently called attention to the possibility of producing a military weapon of unprecedented power. They pointed out that the slow neutron chain reaction would not produce explosive effects much greater than those obtained with ordinary explosive, but that if a chain reaction with fast neutrons could be realized the explosive effects might be enormous. It was realized that ordinary uranium would not be suitable, for even if a fast chain reaction could be realized with it a very large quantity of metal would be required. On the other hand, the isotope U-235, if it could be separated, offered great possibilities. It seemed that the amount required to make a bomb would not be very large, certainly between 1 and 100 kilograms, and rough calculations of the energy released showed that the explosion of such a bomb might be equivalent to many thousands of tons of TNT.

45. The explosion of an atomic bomb is very different in its mechanism from the ordinary chemical explosion, for it can occur only if the quantity of U-235 is greater than a certain critical amount. This is because the reaction depends on the conservation of the neutrons produced in the fissions. In a block of pure, or nearly pure, U-235 the neutrons will either be absorbed in the mass of metal, producing new fissions, or they will escape into the outer air, thus being wasted and useless for propagating the reaction. The proportion of neutrons which escape can be reduced by increasing the size of the block of metal, since the production of neutrons is a volume effect and will, therefore, increase more rapidly with size than the loss by escape, which is a surface effect. It follows that if the explosion is possible it will require a certain minimum amount of material, which is called the critical size. The chain reaction will develop so fully that an explosion occurs only if the quantity of U-235 is greater than this critical amount. Quantities less than this are quite stable and perfectly safe. On the other hand, if the amount of material exceeds the critical size it is unstable and a reaction will develop and multiply itself with enormous rapidity, resulting in an explosion of unprecedented violence. Thus all that is necessary to detonate a bomb of U-235 is to bring together two pieces each less than the critical size, but which when in contact form an amount exceeding it.

46. If an appreciable fraction of the atoms in a mass of U-235 undergo fission within a very short time the amount of energy liberated will be so great that the mass will attain a temperature of many million degrees and a pressure of many millions of atmospheres. It will consequently expand with very great rapidity. As the density of the mass decreases the neutrons can escape more easily from it, and the chain reaction will come to an end. In order to release an appreciable fraction of the available energy, it is therefore necessary that the reaction should develop so rapidly that a substantial part of the material can react before the system has time to fly apart. The neutrons produced in the fission process are fast enough to fulfill this condition (but not if they are slowed down by artificial means as mentioned in the paragraphs above).

47. The interval of time between the beginning and the end of the nuclear reaction is exceedingly brief. In this interval the mass will have expanded so much that the nuclear reaction breaks off, owing to the escape of neutrons. During this interval a substantial part of the mass of U-235 should undergo fission, releasing a large amount of energy. If only 1 pound of U-235 is affected this release of energy will be as much as from 8,000 tons of TNT.

III. THE REALIZATION OF THE ATOMIC BOMB. BRITISH ACTIVITIES AND ORGANIZATION

(a) *Prof. Sir George Thomson's committee*

48. A committee of scientists, with Prof. Sir George Thomson as chairman, was set up in April 1940, originally under the Air Ministry and later under the Ministry of Aircraft Production. This committee was instructed to examine the whole problem, to coordinate work in progress, and to report, as soon as possible, whether the possibilities of producing atomic bombs during this war, and their military effect, were sufficient to justify the necessary diversion of effort for this purpose.

49. The first step to be taken was to establish the nuclear data on which depended the possibility of an atomic bomb and which determined its size. This work had already begun at Liverpool early in 1940 under Prof. Sir James Chadwick, and it was now pushed on more rapidly with Drs. Frisch and Rotblat as his senior collaborators. As the work developed and further problems appeared, it was extended to the Cavendish Laboratory, Cambridge, under Drs. Feather and Bretscher. This also had the advantage of providing an insurance against possible interruption from the effects of enemy bombing, to which the Liverpool laboratory was somewhat exposed. The many theoretical aspects of the problem were investigated by Professor Peierls, assisted by Dr. Fuchs and others. They used the experimental data provided by Liverpool and Cambridge to calculate the critical size of the bomb, they examined the mechanics of the reaction, and calculated the amount of energy likely to be released in an atomic explosion, studying the conditions for increasing the amount.

50. This was clearly only one side of the problem, for it would not have been of immediate practical use to show that an atomic bomb was feasible, provided that a certain quantity of U-235 were available, unless it could also be shown that there was a reasonable possibility of separating such a quantity of U-235 from ordinary uranium, and in a reasonable time. This aspect of the problem was also considered by the committee. In the early stages of the work not much actual experiment could be done owing to the scarcity of men and of facilities, but one method of separation was examined at Liverpool and shown to be unpromising. There are, of course, several methods available for separating isotopes on a laboratory scale. These were examined very carefully by the committee, having in mind that it was essential to select and concentrate on what was likely to be the most economical method, owing to the fact that the manpower and industrial resources of Britain were already wholly engaged on production for immediate war needs. The committee came to the conclusion that the gaseous-diffusion method was by far the most promising for large-scale production. It is based on physical principles which

have long been fully understood and which are easily amenable to calculation, and it seemed likely to make fewer demands for highly skilled precision work.

51. Research on this method of separation was taken up by a team of workers under the direction of Dr. F. E. Simon in the Clarendon Laboratory, Oxford. They were aided on the theoretical aspects by Professor Peierls and his group, and on the chemical side by Prof. W. N. Haworth and a group of men under his direction in the chemistry department, Birmingham University. The Metropolitan-Vickers Electrical Co. and Imperial Chemical Industries, Ltd., were consulted on the many technical questions which were involved. Some experimental work on the diffusion method was also started at Imperial College, London University.

52. By the early summer of 1941 the committee decided that the feasibility of a military weapon based on atomic energy was definitely established and that this weapon had unprecedented powers of destruction; that a method of producing the amounts of material required was in view; and that a fair estimate of the industrial effort needed to accomplish the project could be given. Accordingly, the committee drew up a report dated July 15, 1941, which summarized its findings and which made recommendations for the prosecution of the project on a large scale. By agreement between the Minister of Aircraft Production and the Lord President of the Council, this report was referred to the Scientific Advisory Committee of the War Cabinet, of which Lord Hankey was the chairman.

53. It is proper at this point to consider in general terms what had been done and what remained to be done. The experiments on the nuclear properties of uranium had confirmed that ordinary uranium itself would be useless for the purpose of an atomic bomb and that it would be necessary to use the isotope U-235 which is present in ordinary uranium only to the extent of 0.7 percent. They had further shown that if pure or nearly pure U-235 were available in sufficient bulk a chain reaction could develop which would result in an explosion of extreme violence. The data which had been obtained were sufficient to give an estimate of the amount of U-235 required, but this estimate was very rough and the critical size was known only to a factor of three. The theoretical work had confirmed the early result that the amount of energy released in an atomic explosion would be very large compared with the effect of ordinary bombs. Calculations had been made on the effect of "tamperers" and on the best size of bomb. The method of assembly of the material for use as a weapon and the method of fuzing had been considered, but no experiments had been made. On the problem of production of this material, U-235, it had been decided to concentrate on the gaseous-diffusion method, and research and development on some aspects had shown considerable promise. A scheme had been put forward by Dr. Simon and Professor Peierls which had proceeded to the first stage of design. Leading experts of industrial firms had been consulted who had agreed that it should be possible to build a satisfactory plant, although difficulties were to be anticipated. Estimates were given for the cost of a plant to provide adequate quantities of U-235 and for the time required to build it.

54. In short, the committee was completely convinced that an atomic bomb depending on the fission of U-235 was feasible and that

its effect would be comparable with that of some thousands of tons of TNT, and that a method of separation of U-235 from ordinary uranium could be realized on a large scale so that sufficient quantities of the material could be obtained. Admittedly, a great deal of work remained to be done on all aspects of the project. More precise nuclear data were required so that, for example, the critical size could be estimated with better precision; some points needed confirmation; methods of assembly and of fusing of the material had to be thoroughly examined. The main problem, however, was the design and construction of a plant for the production of the material, and this most essential part of the project was only in its early stages.

55. A different but important aspect of the application of the fission of uranium was also reviewed by the committee. This was the possibility, mentioned in a previous section of this statement, of finding conditions under which a mixture of uranium and some suitable slowing-down medium might give a neutron chain reaction in which the release of energy was obtained in a controlled way. This work was being carried out at Cambridge by Drs. Halban and Kowarski.

These two French physicists had been sent by Professor Joliot to this country at the time of the fall of France in June 1940. They brought with them the 165 liters of heavy water—practically the whole world stock of this material—which the French Government had bought from the Norsk Hydro Co. just before the invasion of Norway. Drs. Halban and Kowarski were instructed by Professor Joliot to make every effort to get in England the necessary facilities to enable them to carry out, with the cooperation of the British Government, and in the joint interest of the Allies, a crucial experiment which had been planned in Paris and for which the heavy water had been acquired. Facilities were provided at the Cavendish Laboratory, Cambridge, and by December 1940 they produced strong evidence that in a system composed of uranium oxide (as actually used) or uranium metal with heavy water as the slowing-down medium, a divergent slow neutron fission chain reaction would be realized if the system were of sufficient size. It seemed likely that, if uranium metal were used, this critical size would involve not more than a few tons of heavy water.

56. The committee concluded that this work had great potential interest for power production but that this particular application was not likely to be developed in time for use in the war. It was, however, recognized that the slow neutron work had a bearing on the military project, for the plutonium which would be produced in such a system could be extracted chemically and might be capable of use in an atomic bomb instead of U-235. The difficulties in the way of building a slow neutron system seemed to be prohibitive at that time. In order to produce the quantities of plutonium which it was guessed, from analogy with U-235, might be required for a bomb, many tons of uranium and many tons of heavy water would have been necessary. The latter particularly would have demanded a major industrial effort.

57. During this period, April 1940 to July 1941, similar problems were occupying the minds of American scientists. Contact was maintained partly by the transmission of reports through the normal scientific liaison machine and partly by visits in both directions by scientists on general scientific missions. Professor Bainbridge, of the

National Defense Research Committee of America (NDRC), was in England in April 1941, and Professor Lauritsen (NDRC) was in England in July of the same year on general scientific matters. Both were invited to attend meetings of Sir George Thomson's committee.

(b) *Directorate of Tube Alloys, DSIR*

58. The Scientific Advisory Committee of the War Cabinet, of which Lord Hankey was the chairman, endorsed the view of Sir George Thomson's committee on the importance of the atomic bomb, with the result that Mr. Churchill, who had been kept informed on the developments by Lord Cherwell, asked Sir John Anderson, in September 1941, to undertake personal responsibility for the supervision of this project as one of great urgency and secrecy. To advise him he set up, under his chairmanship, a consultative council, of which the members were the chairman of the Scientific Advisory Committee of the War Cabinet (Lord Hankey and, later, Mr. R. A. Butler), the president of the Royal Society (Sir Henry Dale), the Secretary of the Department of Scientific and Industrial Research (Sir Edward Appleton), and Lord Cherwell. To insure continuity the Minister of Aircraft Production, Lord Brabazon of Tara, served on this council at the beginning.

59. The direction of the work was entrusted to a new division of the Department of Scientific and Industrial Research and thus fell under the general administrative charge of Sir Edward Appleton as Secretary of the Department. It was known, for reasons of security, as the Directorate of Tube Alloys. Mr. W. A. Akers was, at Sir John Anderson's request, released by the Board of Imperial Chemical Industries, Ltd., to act as Director, with direct access to the Minister on all questions of policy. Mr. Akers had as his deputy and principal assistant, Mr. M. W. Perrin, who was also lent by ICI. Mr. Akers was advised by a technical committee, under his chairmanship, composed of the scientists who were directing the different sections of the work and some others. The original members were Prof. Sir James Chadwick, Professor Peierls, and Drs. Halban, Simon, and Slade, with Mr. Perrin as secretary. Later it was joined by Sir Charles Darwin and Professors Cockcroft, Oliphant, and Feather.

(c) *Visit of United States Mission to Britain, November 1941*

60. In November 1941, at the time when the new TA (Tube Alloys) organization was set up, an American mission, composed of Professors Pegram and Urey, of Columbia University, came to this country to study the experimental and theoretical work which had been done on the TA project, to learn our ideas for future work, and to agree on arrangements for complete and rapid interchange of information. They visited all the establishments where TA work was in progress and took part in a meeting of the new TA Technical Committee at which progress was reviewed and new programs discussed.

(d) *Visit of British TA Mission to United States of America, February-April 1942*

61. Under the new organization a great extension of the scale of work, both in university and industrial laboratories, was started. In the United States of America, also, a greatly intensified TA effort had followed the return of Professors Pegram and Urey from England. A mission composed of Mr. Akers, Dr. Halban, Professor Peierls, and

Dr. Simon visited America at the beginning of 1942 to ensure that the programs planned for the United Kingdom were coordinated as efficiently as possible with the American work.

62. Every section of the American program was examined in detail and it was already clear that the new American TA organization intended to make the fullest use of the enormous resources available in the universities and in industry.

(e) *British TA program*

63. It was clear in 1942 that, even though granted very high priority, the scale upon which TA research and development could be undertaken in the United Kingdom must be far smaller than in America. A large proportion of the qualified physicists was occupied in other urgent war work and the industrial resources of Britain were engaged, at that time, in war production to a much greater extent than was the case in the United States of America.

64. Consequently it was necessary to limit the field of TA investigation. Broadly the programs chosen were:

Determination of essential nuclear physical data.

Theoretical investigations into the chain reaction in an atomic bomb, the dimensions and design of a bomb, and its blast effect.

The gaseous-diffusion U-235 separation process. This included theoretical and experimental research on the process, the design, and construction of prototype machines, the manufacture of materials needed, studies on materials of construction, etc.

Investigation of slow neutron divergent systems, especially with heavy water as the slowing-down medium.

The manufacture of uranium metal for the slow neutron systems or piles.

The manufacture of heavy water.

(i) *Location of work*

65. Experimental determination of nuclear physical data: The research teams at Liverpool and Cambridge Universities were considerably strengthened and small programs were started at Bristol and Manchester Universities.

Prof. Sir James Chadwick exercised general supervision over all this work.

Slow neutron systems: This work continued at Cambridge under Drs. Halban and Kowarski, with the collaboration of Dr. Bretscher.

Theoretical investigations into chain reaction, etc.: Professor Peierls and his team continued their studies at Birmingham, with collaboration on special problems with Professor Dirac, of Cambridge.

Later, when Professor Peierls moved to United States of America, Dr. A. H. Wilson led this group.

66. The gaseous-diffusion process—University research: The experimental work was under the general direction of Dr. Simon. His extended team at the Clarendon Laboratory had, as leaders, Mr. Arms and Drs. Kurti and Kuhn. The theoretical study of the process remained in the hands of Professor Peierls and his group at Birmingham. Also at Birmingham University Professor Haworth, who had been very active in TA from the days of the Thomson committee, had a group working on a number of chemical problems connected with the diffusion project.

67. Research and development in industrial establishments: The Metropolitan-Vickers Electrical Co., Ltd., accepted a contract for the design and construction of certain prototype machines embodying the principles worked out by Dr. Simon and Professor Peierls. The successful construction of these machines was a considerable technical achievement in view of the novel features contained in them. They were later abandoned in favor of a simpler design which offered certain advantages in operation.

68. Imperial Chemical Industries, Ltd. (ICI), were entrusted with the contract for the development of the diffusion plant as a whole, and the work was carried out by the Billingham division of that company. This program was a very extensive one as it covered everything involved in the design of a complete plant, including the working out of flow sheets, research on materials of construction, and the development of new types of valves, instruments, etc., to meet novel conditions.

69. In this work they were assisted by the metals division of ICI, which studied various manufacturing processes. ICI Metals, Ltd., had as subcontractors Percy Lund Humphries and Co., Ltd., and the Sun Engraving Co., Ltd., coordinated by Dr. Banks, whose services were made available by the Printing and Allied Trades Research Association. Metallization, Ltd., also made a valuable contribution to this section of the work. Processes for the manufacture of the many special chemicals required were worked out by the general chemicals division of ICI, assisted by the dyestuffs division. The Mond Nickel Co., Ltd., under a separate contract, made a very successful investigation of certain metallurgical problems.

70. Although some of these research programs will be carried on a little longer, largely in order to establish optimum conditions, ICI Billingham division has been able to close down the main program after producing flow sheets and designs for diffusion plants operating over a fairly wide range of conditions. In broad outline the plant is, of course, similar to the American diffusion plant now in operation, but it embodies certain novel features.

71. The manufacture of uranium metal: ICI (General Chemicals), Ltd., undertook the manufacture of uranium metal and succeeded in developing a satisfactory method. The conversion of the metal into rods, as required for a pile, was tackled by ICI metals division. It soon became apparent that many problems required study in connection with the physical, metallurgical, and chemical properties of the metal. Research on these points was undertaken by the National Physical Laboratory, Dr. Simon at Oxford with a subgroup at Birmingham, the British Non-Ferrous Metals Research Association, Dr. Orowan at Cambridge, and the Alkali Division of ICI.

72. Heavy water: ICI Billingham division, which had some experience in the separation of heavy water on a laboratory scale, was asked to prepare a scheme for the production of this material on a large scale. After examining various methods they reported that the most suitable process to adopt in this country, if speed of construction and certainty of operation were paramount, was the electrolytic process incorporating the vapor phase catalytic exchange principle introduced by Professor Taylor of Princeton University, United States of America. Flow sheets and designs were prepared for a plant in which the exchange system was of a novel design believed

to be simpler and more efficient than any of those hitherto used or suggested.

73. Electromagnetic method: Through the interchange of information we were aware of the remarkable development work which was being carried on at the University of California under Prof. E. O. Lawrence, with the object of converting the mass-spectrograph, used for the separation of isotopes in minute quantities, into a large-scale production apparatus, but it was decided not to start any corresponding research in this country as the physicist most suitable for this work, Professor Oliphant, of Birmingham, was engaged in other urgent war work.

74. In July 1943 it was possible to release him from that work so that it was decided to start a research program at Birmingham on this method. Before work had really started Professor Oliphant visited America in connection with discussions on a closer integration of British and American TA efforts, in which it was agreed, as described below, that the most efficient course to follow in the joint interest was for Professor Oliphant and most of his team to move to United States of America. The British electromagnetic program was therefore abandoned.

75. After Professor Oliphant's return to this country in March 1945 it was decided to arrange for research to be started on some of the electrical engineering problems involved in this type of plant. With this object research contracts have been placed with the British Thomson-Houston Co., the General Electric Co., and Metropolitan-Vickers Electrical Co. In addition, the first and last of these companies had already given considerable assistance by lending to the British TA organization the services of Dr. K. J. R. Wilkinson, Dr. T. E. Alliboné, and other physicists and engineers.

(ii) *Coordination of programs*

76. It will be seen from the account of the diffusion plant research project that many university and industrial teams were concerned, so that proper coordination of the work became an important matter. The same applied to the work on the production of uranium metal and its metallurgy. It was also evident that some of the chemical research carried out for one project would be of interest in connection with another. To insure satisfactory coordination of the work certain committees and panels were set up.

77. The diffusion work was dealt with by the Diffusion Project Committee reporting to the TA Technical Committee. The members of this Diffusion Committee were:

Mr. W. A. Akers, Director, TA (DSIR), chairman.

Maj. K. Gordon (later Dr. G. I. Higson), ICI Billingham division, deputy chairman.

Dr. F. E. Simon, Oxford University.

Mr. H. S. Arms, Oxford University.

Prof. R. Peierls (later Dr. A. H. Wilson), Birmingham University.

Mr. J. D. Brown, ICI Billingham division.

Dr. J. B. Harding, ICI Billingham division.

Mr. C. F. Kearton, ICI Billingham division.

Mr. S. Labrow, ICI Billingham division.

Mr. J. R. Park, ICI Billingham division.

Mr. N. Elce, Metropolitan-Vickers Electrical Co.

Mr. H. Smethurst, Metropolitan-Vickers Electrical Co.

Mr. M. J. S. Clapham, ICI metals division.

Mr. S. S. Smith, ICI metals division.

Mr. M. W. Perrin, TA Directorate (DSIR), secretary.

78. The chemical research was coordinated by a panel reporting to the TA Technical Committee. The constitution of this panel was:

Prof. W. N. Haworth, Birmingham University, chairman.

Dr. R. E. Slade, ICI vice chairman.

Dr. F. E. Simon, Oxford University.

Dr. J. P. Baxter, ICI general chemical division.

Dr. J. Ferguson, ICI alkali division.

Mr. J. R. Park, ICI Billingham division.

Mr. M. W. Perrin, TA Directorate (DSIR), secretary.

79. Uranium metal production and metallurgical matters were handled by a Metal Panel, whose members were:

Mr. E. Colbeck, ICI alkali division, chairman.

Dr. W. O. Alexander, ICI metals division.

Dr. N. P. Allen, National Physical Laboratory.

Mr. G. L. Bailey, British Non-Ferrous Metals Research Association.

Dr. A. M. Roberts, ICI general chemicals division.

Dr. F. E. Simon, Oxford University.

Mr. D. C. G. Gattiker, TA Directorate (DSIR), secretary.

(iii) *Research Contracts. Patents.*

80. The contracts under which research is carried on in university laboratories contain clauses reserving exclusively to the Government all discoveries, inventions, and other results arising from the work. In the case of researches carried on by industrial firms all results, inventions, and developments in detail applicable within the TA field become exclusively the property of the Government. Where an invention is also usable outside the TA field provision has been made whereby its use outside the field can be made available to industry. It is within the discretion of the Government to decide whether or not a particular use is within or without the field. Questions relating to inventions and patents are dealt with by a small Patents Committee composed of:

Mr. A. Blok, DSIR, chairman.

Mr. W. A. Akers, Director TA (DSIR).

Mr. M. W. Perrin, TA Directorate (DSIR).

(f) *Joint British-Canadian-American slow neutron project in Canada*

81. Toward the end of 1942 it was decided that the slow neutron research in progress at Cambridge would proceed more quickly and efficiently if it were transferred to a place geographically nearer to Chicago where the corresponding American work was being carried out.

82. A proposal was made to the Canadian Government that a joint British-Canadian research establishment should be set up in Canada to work in close touch with the American group. The Canadian Government welcomed the suggestion, with the result that at the beginning of 1943 a large research establishment was set up in Montreal under the general direction of the National Research Council of Canada.

83. Practically the whole of the Cambridge group, under Dr. Halban, was moved to Montreal where the research staff was rapidly

augmented by many Canadian scientists, several new recruits from the United Kingdom, and a certain number from the United States. The laboratory was at first directed by Dr. Halban. He resigned this position early in 1944 and Prof. J. D. Cockcroft was appointed to succeed him.

84. During the spring of 1944 the Americans joined actively in that project which now became a joint British-Canadian-American enterprise. Its scope was enlarged and in 1944 a site was selected on the Ottawa River, near Petawawa, Ontario, for the construction of a pilot scale pile using heavy water supplied by the United States Government as the slowing-down medium.

85. This joint enterprise in Canada has been described more fully in statements issued by the Canadian Government. It represents a great contribution, both in men and money, by that Government to the development of this new branch of science and its application.

(g) Transfer of British TA research groups to United States of America

86. In August 1943 Sir John Anderson visited America and discussed with the United States authorities the means by which the cooperation between the two countries might best be placed upon a more formal basis. Further discussions took place subsequently between President Roosevelt and Mr. Churchill which led to the setting up of a Combined Policy Committee in Washington.

87. Prof. Sir James Chadwick, who was appointed scientific adviser to the British members of this committee, examined, with those responsible for the scientific and technical direction of the American project, the question whether there were any further steps which could be taken in the pooling of scientific and technical effort which would accelerate the production of atomic bombs in the United States of America.

88. As a result of these discussions it was decided to move to America a large number of the scientists working in England on TA in order that they might work in the appropriate American groups.

89. At this time Professor Bohr escaped from Denmark and the British Government appointed him as an adviser on scientific matters. His scientific advice on the TA project has been available both in this country and in the United States to the two Governments.

90. Professor Oliphant and his team from Birmingham University were moved to Berkeley to work with Professor Lawrence's group engaged in research on the electromagnetic isotope separation project. They were joined by other physicists from Britain, including Professor Massey of University College, London; Dr. T. E. Allibone, and Dr. K. J. R. Wilkinson, who worked partly at Berkeley and partly at the electromagnetic separation plant itself. Dr. Emeleus of Imperial College, London; Dr. J. P. Baxter, and others were transferred to the electromagnetic plant. Dr. Frisch, from the Liverpool nuclear physics group, and Dr. Bretscher, from the corresponding Cambridge section, together with some members of their teams, were moved into the great American TA research establishment at Los Alamos, which is described in American statements on the project. They were joined, at that time or later, by a number of other British scientists including Professor Peierls and Dr. Penney, of Imperial College, London University. Prof. Sir Geoffrey Taylor also paid several visits to this establishment.

91. The effect of these transfers and others which were made to the Montreal project was to close down entirely all work in the United Kingdom on the electromagnetic process and to reduce almost to nothing the nuclear physical research. Nevertheless, there is no doubt that this was the proper course to follow, in the light of the decision which had been taken to give the highest priority to the production in the shortest possible time of an atomic bomb for use in this war.

IV. CHRONOLOGICAL TABLE: DEVELOPMENTS IN NUCLEAR PHYSICS AND IN THE ATOMIC BOMB PROJECT

- Ca. 400 B. C. Democritus, a Greek philosopher, one of the first to propose an atomic theory.
- 79 B. C. Lucretius, Roman philosopher, expounds an atomic theory in *De Rerum Natura*, the greatest philosophical poem of all times.
- The atomic theory persisted in the writings of speculative philosophers for many centuries until the time of John Dalton (British), when it first appeared in a form useful to the growing science of experimental chemistry.
1789. M. H. Klaproth (German) isolates from pitchblende a "half-metallic substance" which he named uranium after the planet Uranus, which had recently (1781) been discovered.
1803. Dalton expresses theory that all chemical elements are made of atoms.
1811. Avogadro (Italian) distinguishes between atoms and molecules.
1816. Prout (British) voices hypothesis that all elements are simply various combinations of hydrogen atoms.
1859. Bunsen and Kirchhoff (German) develop spectroscope as an instrument for analyzing light and for studying the chemical composition of incandescent gases.
1871. Mendeleeff (Russian) and Meyer (German) independently develop the periodic table of the elements.
1891. G. J. Stoney (Irish) coins name, "electron," for the elementary particles of electricity.
1895. W. C. Röntgen (German) discovers X-rays.
1896. H. Becquerel (French) discovers phenomenon of radioactivity in uranium ores.
1896. J. J. Thomson (British) studies deflection of cathode rays by a magnet and concludes these rays are actually streams of discrete particles of negative electricity, thus giving evidence for the physical reality of Stoney's electrons.
1897. Rutherford (British) studies radiations from uranium after Becquerel's discovery of radioactivity and designates three types of rays—*alpha*, *beta*, and *gamma* rays.
1898. Marie and Pierre Curie (Polish-French) discover radium and polonium.
1900. Planck (German) announces the quantum theory that energy manifests itself in discrete amounts called quanta.

- Elster, Geitel (German), and Wilson (British) show that a closed ionization chamber demonstrates weak but persistent conductivity. Wilson suggests ionization might be due to radiation coming from outside the earth's atmosphere.
1905. Einstein (German) publishes his "special theory of relativity" which includes the famous equation $E=Mc^2$ for the equivalence of energy and mass.
1906. Rutherford and Geiger develop the first electrical instrument for counting alpha particles. This became, through successive refinements, the Geiger counter for detecting atomic particles of various kinds. It is one of the most powerful observing and measuring instruments in the physical sciences.
1910. Millikan (American) begins his classical experiments to measure the exact charge of the electron.
The possibility of isotopes, atoms with different weights but identical chemical properties, is suggested by Soddy.
1911. Rutherford proposes theory of the nuclear atom with its mass and positive charge at its center.
Barkla (British) finds number of electrons on outside of atom by studies on scattering of X-rays.
1912. C. T. R. Wilson (British) devises the modern form of cloud expansion chamber for the visible study of ionized particles. This is another fundamental tool of the nuclear physicist.
Laue, Friedrich, and Knipping (German) demonstrate X-ray diffraction by crystals.
W. H. and W. L. Bragg (father and son, British) develop X-ray spectrometer using crystals as diffraction gratings.
1913. F. Soddy, K. Fajans, and A. S. Russell independently explain laws of radioactive disintegration.
Niels Bohr (Danish) devises model of atom with central nucleus and electrons rotating in orbits about it.
Moseley (British) establishes atomic numbers of the elements through studies of their X-ray spectra.
1915. Einstein announces his general theory of relativity.
1919. Rutherford changes nitrogen into oxygen by bombarding atomic nuclei with alpha particles. This was the first artificial transmutation of an element in history.
- 1919-32. F. W. Aston (British) devises the mass-spectrograph and uses it to measure the atomic weights of the isotopes of most chemical elements.
1920. Aston measures the atomic weight of hydrogen with the mass-spectrograph and Harkins (American) suggests the existence of an atomic particle with zero electric charge. He uses the name "neutron" for it.
1922. Boron, fluorine, sodium, aluminum, and phosphorus are artificially disintegrated by Rutherford and Chadwick.

- Millikan and his collaborators begin their studies on cosmic rays.
1924. DeBroglie (French) starts quantum mechanics by suggesting existence of waves associated with particles.
1927. Davisson and Germer (American) show that beams of electrons can behave as if they were waves. Their experimental results were in good agreement with DeBroglie's equations.
1929. G. Gamow (Russian), R. W. Gurney (British), and E. U. Condon (American) show that the laws of radioactivity are explained in terms of quantum mechanical behavior of particles in the nucleus.
1930. The positron, a particle of positive electricity, is predicted from theoretical consideration by P. A. M. Dirac.
1931. W. M. Latimer, H. C. Urey, H. L. Johnson, R. T. Birge, and D. H. Menzel (American) construct table of isotopes and predict existence of unknown isotopes. Many of these have already been discovered.
- E. O. Lawrence (American) invents the cyclotron.
1932. H. C. Urey, F. Brickwedde, and Murphy (American) discover heavy hydrogen (deuterium).
- J. Chadwick (British) discovers the neutron.
- C. D. Anderson (American) discovers positron resulting from passage of cosmic rays through matter.
- J. D. Cockcroft and E. T. S. Walton (British) find mass converted to energy when the lithium nucleus is bombarded with artificially accelerated protons.
1933. Chadwick, Blackett, and Occhialini demonstrate production of positrons through bombardment of matter with gamma rays.
- Van de Graff (American) designs electrostatic generator to produce up to 10,000,000 volts.
- C. C. Lauritsen uses million-volt X-ray tube for atomic studies.
1934. E. Fermi (Italian) bombards uranium with slow neutrons and creates new element with atomic number 93.
- Irene Curie and F. Joliot (French) produce artificial radioactivity.
1935. Dempster (American) discovers uranium-235.
1939. O. Hahn and F. Strassmann (German) bombard uranium with neutrons and find barium and krypton among the fragments of the uranium nuclei.
- Lise Meitner and O. Frisch (German) propose theory that this splitting of the uranium atom, to which they gave the name "fission," is accompanied by the release of enormous quantities of energy.
- Frisch and Joliot independently and almost simultaneously demonstrate experimentally that large amounts of energy are actually released as a result of uranium fission.

- Bohr and Wheeler present early comprehensive theory of nuclear fission. Bohr suggests that uranium-235 undergoes fission.
- Meitner studies fission in thorium.
- Several American laboratories (Columbia, Johns Hopkins, Carnegie Institution, and California) confirm fission experiments.
- Possibility of military uses of energy released by fissionable materials envisaged by L. Szilard, E. Fermi, E. Wigner, and others.
- In fall of 1939, Alexander Sachs transmits a letter from Einstein to President Roosevelt suggesting that work on fission be encouraged.
- President Roosevelt appoints Advisory Committee on Uranium.
1940. National Defense Research Committee organizes and takes over uranium research project.
- Two new elements, neptunium and plutonium, are created and quantity production becomes a definite possibility.
- Nier, of Minnesota, and Dunning, of Columbia, independently confirm Bohr's prediction of the fissionability of uranium-235.
1941. Possibilities of using plutonium for a bomb were investigated.
- Office of Scientific Research and Development takes over uranium project.
1942. August 13. The Manhattan District of United States Army, Corps of Engineers, is established for the production of atomic bombs.
- December 2. The first self-maintaining nuclear chain reaction is put into operation on the campus of the University of Chicago.
1943. April. Laboratory for bomb research opened at Los Alamos, N. Mex.
1945. July 16. The first experimental atomic bomb is successfully exploded in New Mexico.
- August 6. The first military atomic bomb is dropped on Hiroshima in Japan.
- August 6. President Truman issues first announcement on the use of the bomb.
- August 8. Second atomic bomb dropped on Nagasaki.
- August 11-12. Official report, "Atomic Energy for Military Purposes," by H. D. Smyth, is released to the public.
- October 3. President Truman sends message to Congress recommending legislation for domestic control of atomic energy.
- November 15. Declaration on atomic energy issued by President Truman and Prime Minister Attlee and Mackenzie King.
- December 27. Moscow Agreement announced.
1946. January 24. United Nations Atomic Energy Commission is created.

V. GLOSSARY: SCIENTIFIC TERMS RELATING TO ATOMIC ENERGY

Alpha-particle, a positively charged particle emitted by certain naturally radioactive substances like uranium and radium. The alpha-particle has been found to be identical with the helium atom nucleus, which consists of two protons and two neutrons.

Atom, the smallest unit of which a chemical element is built. The simplest atoms are those of hydrogen; the most complex, those of uranium. The word is derived from the Greek and means "an uncuttable thing," which makes the name rather ill adapted to an age of atom smashing and reflects the older view that atoms are fundamental, indestructible things in nature.

History.—Some suggestions that matter is made of atoms occur in the writings of the ancient Greeks and Romans, especially Democritus and Lucretius. A scientific approach waited upon the work of John Dalton, British chemist, about 150 years ago. He developed an atomic theory on the basis of known facts about the composition of chemical compounds and first arrived at an understanding of the relative weights of the better-known elements.

In the middle of the nineteenth century, a Russian chemist, Mendeleeff, discovered that when the elements are arranged in a scale ordered according to their atomic weights, elements with similar characteristics appear at regular intervals in the scale. This arrangement of the elements is known as the periodic system of the elements. It first led men to the realization that an atom of any element must be built on a pattern which partially repeats itself in other elements of similar chemical properties.

Toward the end of the nineteenth century, especially as a result of the work of Faraday (British) and Arrhenius (Swedish), it was learned from an examination of the facts of electrochemistry (the science behind the art of silverplating) that atoms are made of particles of electricity. At the end of the century the discovery of electrons by J. J. Thomson (British) and of X-rays by Röntgen (German) made this fact of the electrical nature of matter even clearer. Men began to investigate how the properties of matter could be fully explained in terms of atoms made of electrified particles.

Modern view.—In 1912 Rutherford (British) developed from experiments on radioactivity the nuclear model of the atom. He learned that atoms have a central relatively heavy particle, the *nucleus*, which carries a positive electric charge. This nucleus is surrounded by electrons carrying a negative electric charge sufficient to neutralize the positive charge of the nucleus. Thus, though made up of electrified particles, the whole atom is electrically neutral.

The full theoretical development of the nuclear atom model was initiated by Bohr (Danish), who, with others, was able to relate the theory to the principal facts of spectroscopy (study of light emitted by atoms). Indeed, a rich vein of information about the details of atomic structure was derived from the study of light itself. This occupied the central position in physical research in the period 1915 to 1935.

In 1926, the detailed knowledge was greatly advanced by discoveries made by L. DeBroglie (French), E. Schrödinger (Austrian), and C. J. Davisson (United States) concerning the nature of the electron. It was found that the particles within an atom do not, as was first supposed, move according to the same mechanical laws as those governing planets or baseballs. This discovery led to the development of a new branch of physics known as quantum mechanics, and has raised problems which have not yet been fully settled.

Atomic bomb. While the details of the atomic bomb are military secrets, certain facts of interest have been disclosed.

Atomic bombs cannot be made smaller than a certain critical size. A small lump of uranium will not explode because it loses too many neutrons through its surface for a chain reaction to maintain itself. Before it is fired, the bomb contains the active material in two or more separated lumps, too small to explode by themselves, and the act of firing consists in bringing these together, at a great velocity, into a single lump large enough to be explosive.

Enough energy is released during the first few millionths of a second after firing to bring the material to a temperature of many millions of degrees. Thus the uranium is completely vaporized, enormous pressures develop, and expansion begins. In consequence of this expansion, the material becomes less dense, the neutrons can leak out more readily, and the chain reaction is stopped well before all the uranium is utilized.

Atomic number (usually denoted by Z in formulas). This gives the number of protons (positively charged) inside the nucleus of the atom, and also the number of electrons (negatively charged) outside the nucleus. Each chemical element is distinguished by a different atomic number.

All the atoms of a particular element have the same atomic number, for the chemical properties which characterize an element are determined by the number of electrons in the atom, in other words, by its atomic number. But not all atoms of the same chemical element have the same atomic weight. (See *isotopes*, *atomic weight*, and *nucleus*.)

Atomic weight. This term is used to denote the weight of any atom as measured on an arbitrary scale based on the weight of an oxygen atom. On this scale the figure 16 is chosen as the weight of the oxygen atom. Adopting this convention, it is found that the weights of atoms of the other elements can be expressed very nearly as whole numbers. These whole numbers are called the *rough* atomic weights. The atomic weight of ordinary hydrogen

is 1; that is, a hydrogen atom is roughly one-sixteenth as heavy as an oxygen atom. The atomic weight of heavy hydrogen is 2; helium, 4; lithium atoms occur in two varieties, with weights, 6 and 7. The figure giving the rough weight of an atom on this scale is also the total number of protons and neutrons contained in the nucleus of the atom.

The *precise* atomic weights differ somewhat from these whole numbers by approximately one-thousandth of the total weight. This difference, however, is of decisive importance for estimating the energy released on the formation of these atoms in accordance with the *mass-energy equivalence* relation.

In precise work it is important to realize that two different scales for atomic weights are in use. The "physicists' scale" is one in which the weight of the abundant isotopic form of oxygen is arbitrarily taken as exactly 16. The "chemists' scale" takes the average weight of the various kinds of oxygen atoms as they occur in nature as exactly 16. The form scale is more convenient for studies of atomic energy.

International table of atomic weights

	Symbol	Atomic number	Atomic weight		Symbol	Atomic number	Atomic weight
Aluminum.....	Al	13	26.97	Neodymium.....	Nd	60	144.27
Antimony.....	Sb	51	121.76	Neon.....	Ne	10	20.183
Argon.....	A	18	39.944	Neptunium.....	Np	93	239
Arsenic.....	As	33	74.91	Nickel.....	Ni	28	58.69
Barium.....	Ba	56	137.36	Nitrogen.....	N	7	14.008
Beryllium.....	Be	4	9.02	Osmium.....	Os	76	190.2
Bismuth.....	Bi	83	209.00	Oxygen.....	O	8	16.000
Boron.....	B	5	10.82	Palladium.....	Pd	46	106.7
Bromine.....	Br	35	79.916	Phosphorus.....	P	15	30.98
Cadmium.....	Cd	48	112.41	Platinum.....	Pt	78	195.23
Calcium.....	Ca	20	40.08	Plutonium.....	Pu	94	239
Carbon.....	C	6	12.010	Potassium.....	K	19	39.096
Cerium.....	Ce	58	140.13	Praseodymium.....	Pr	59	140.92
Cesium.....	Cs	55	132.91	Protactinium.....	Pa	91	231
Chlorine.....	Cl	17	35.457	Radium.....	Ra	88	226.05
Chromium.....	Cr	24	52.01	Radon.....	Rn	86	222
Cobalt.....	Co	27	58.94	Rhenium.....	Re	75	186.31
Columbium.....	Cb	41	92.91	Rhodium.....	Rh	45	102.91
Copper.....	Cu	29	63.57	Rubidium.....	Rb	37	85.48
Dysprosium.....	Dy	66	162.46	Ruthenium.....	Ru	44	101.7
Erbium.....	Er	68	167.2	Samarium.....	Sm	62	150.43
Europium.....	Eu	33	152.0	Scandium.....	Sc	21	45.10
Fluorine.....	F	9	19.00	Selenium.....	Se	34	78.96
Gadolinium.....	Gd	64	156.9	Silicon.....	Si	14	28.06
Gallium.....	Ga	31	69.72	Silver.....	Ag	47	107.880
Germanium.....	Ge	32	72.60	Sodium.....	Na	11	22.997
Gold.....	Au	79	197.2	Strontium.....	Sr	38	87.63
Hafnium.....	Hf	72	178.6	Sulfur.....	S	16	32.06
Helium.....	He	2	4.003	Tantalum.....	Ta	73	180.88
Holmium.....	Ho	67	164.94	Tellurium.....	Te	52	127.61
Hydrogen.....	H	1	1.008	Terbium.....	Tb	65	159.2
Indium.....	In	49	114.76	Thallium.....	Tl	81	204.39
Iodine.....	I	53	126.92	Thorium.....	Th	90	232.12
Iridium.....	Ir	77	193.1	Thulium.....	Tm	69	169.4
Iron.....	Fe	26	55.85	Tin.....	Sn	50	118.70
Krypton.....	Kr	36	83.7	Titanium.....	Ti	22	47.90
Lanthanum.....	La	57	138.92	Tungsten.....	W	74	183.92
Lead.....	Pb	82	207.21	Uranium.....	U	92	238.07
Lithium.....	Li	3	6.940	Vanadium.....	V	23	50.95
Lutecium.....	Lu	71	174.99	Xenon.....	Xe	54	131.3
Magnesium.....	Mg	12	24.32	Ytterbium.....	Yb	70	173.04
Manganese.....	Mn	25	54.93	Yttrium.....	Y	39	88.92
Mercury.....	Hg	80	200.61	Zinc.....	Zn	30	65.38
Molybdenum.....	Mo	42	95.95	Zirconium.....	Zr	40	91.22

Beta-particle, a negatively charged particle emitted by certain radioactive substances. The beta-particle, it has been discovered, is simply a high-speed electron having energies such as would be obtained by accelerating an electron by a potential of several million volts. While beta-particles are emitted by the nucleus, it is not thought that electrons are contained in the nucleus as such. It is believed, however, that they are created (and immediately emitted) by a transformation of some of the energy in the nucleus. The processes involved in beta-particle radioactivity are at present not well understood.

Capture—in particular, capture of a neutron by an atomic nucleus. In atomic physics this term refers to any process in which a neutron, on colliding with an atomic nucleus, sticks to it or is absorbed into it, or from which fission results. Depending on the nucleus which is struck and the speed of the neutron striking it, the capture may have one of several results. For example, if a neutron is captured by a nucleus of ordinary hydrogen, some energy is given off as gamma radiation and there results a stable compound which is a nucleus of heavy hydrogen, also called a deuteron. When a neutron of any energy is captured by a U-235 nucleus, the result is the splitting of the U-235 nucleus, i. e., fission. On the other hand only neutrons having energy of more than about 1,000,000 electron volts are able to produce fission when captured by U-238. Those of lower energy stick to the nucleus, that is, they are captured to form a nucleus of U-239 which later, through natural radioactivity, transforms itself into neptunium.

Chain reaction, a term applied to any chemical or nuclear transmutation process in which some of the products of a particular change assist the further development of that change.

Specifically, in the fission chain reaction used in the atomic bomb, or the power-producing uranium pile, the occurrence of fission is caused by the capture of a neutron by a uranium atom. Then, when fission occurs, more neutrons are released, which in turn produce fission in additional uranium atoms, and so on.

In practical devices constructed to produce chain reactions, not every neutron emitted in fission causes more fission. Indeed, except to cause an explosion, a perfect chain reaction, i. e., one in which every neutron causes fission, is not desirable. And in the atomic bomb, designed to produce the most efficient chain reaction, some of the neutrons leak out of the surface before they cause fission. In the uranium pile some of the neutrons are absorbed by impurities or by control rods deliberately introduced to regulate the rate at which fission occurs.

The possibility of obtaining a true self-maintaining chain reaction depends on the fact that more neutrons are emitted in a fission than are required to produce it. The attainment of an actual chain reaction in a practical arrangement depends on fulfilling the condition that, in spite of inevitable losses, on the average at least one of the neutrons set free by each fission is effectively utilized in producing another fission.

Cross-section, a term used in atomic physics in measuring the number of collisions of a given kind experienced by particles bombarding a given target. It tells the effective target area for the process in question and is thus usually expressed in square centimeters.

The cross-section in a bombardment of an atomic nucleus, i. e., the effective area exposed to a bombarding neutron of a certain speed, is, of course, an exceedingly small quantity, of the order of 10^{-25} sq. cm.

To give a familiar example, one may compare a bombardment process to shooting repeatedly at random into a large flock of ducks. The greater the average size of the ducks (the "cross-section") and the greater their number in a given area, the more of them will be hit. So, likewise, the number of neutrons going at a certain speed through a block of uranium which will be captured by uranium atoms varies with the capture *cross-section* of uranium and, also, with the number of uranium atoms in unit volume of the metal.

Cyclotron, a research instrument which is designed to provide a beam of high energy protons and deuterons. It was invented in 1930 by E. O. Lawrence (University of California) and has been of great importance as a tool for research in nuclear physics.

The cyclotron involves a large electromagnet having a vacuum chamber between its poles. In this chamber an electric arc is operated at the center to act as a source of protons or deuterons. Inside the chamber are two semicircular electrodes to which is applied a radiofrequency voltage. The protons are accelerated by the electrical field between these electrodes, they then move in a semicircular path as a result of the action of the magnetic field. During the time the protons are moving around in this semicircular path the voltage on the electrodes reverses so that the proton again is speeded up on traversing again the field between the electrodes. In this way the protons are given many successive increases in speed and acquire in the end energies of the order of several million electron-volts. (See *energy*.)

The beam of high energy particles so produced is allowed to impinge on various materials so as to produce nuclear transformations in the atoms of these targets.

Up to the beginning of the war there had been constructed about 20 large cyclotrons in various research laboratories in America, two or three in Russia and in England, one in Denmark, one in France, and three in Japan. They found extensive application in preparing artificial radioactive materials for use in medical research.

Deuterium, the special name given to heavy hydrogen, discovered in 1932 by Urey, then at Columbia University, and Brickwedde, of the National Bureau of Standards. Deuterium has almost the same chemical properties as the more abundant kind of hydrogen, although its atoms are twice as heavy. Heavy hydrogen makes up 1 part in 5,000 of ordinary hydrogen.

Deuteron, the special name given to the *nucleus* of heavy hydrogen. It is the simplest composite atomic nucleus and consists of one proton and one neutron.

Electron, the smallest known particle having a negative electric charge. The part of an atom outside the nucleus is made of electrons, the number of which, being equal to the protons in the nucleus, is the same as the *atomic number* of the atom. An electric current in a wire consists of the motion of electrons through

the material of the wire. A current of 1 ampere corresponds to the passage of 6.24 billion billion electrons in one second. In radio tubes and in cathode ray (television) tubes, the current is carried by a stream of electrons. The *beta-particles* emitted by certain radioactive materials are high-speed electrons.

The mass of electrons at rest is so small that 5.02×10^{29} of them are needed to make a pound ($10^{29} = 1$ followed by 29 zeros). The mass of all the electrons contained in a lump of matter is only about one three-thousand-six-hundredth of the total mass, most of the mass being contained, not in the electrons, but in the atomic nuclei. An electron in rapid motion has more mass than one at rest because of the *mass-equivalence* of its energy of motion. An electron accelerated through 512 kilovolts has twice as much mass as one at rest. Thus, the beta-particles as they are emitted by radioactive materials, and the electrons in high voltage X-ray tubes, may have several times their normal mass.

Electron-volt, a unit of energy; the amount of energy acquired by an electron when it falls through a potential difference of 1 volt. In terms of the basic unit of energy, the erg, the relation is

$$1 \text{ electron-volt} = 1.60 \times 10^{-12} \text{ erg.}^1$$

(See *energy*.)

Element, one of the basic kinds of matter—hydrogen, carbon, oxygen, uranium, etc.—from which all chemical compounds are formed. (See *atom*.) Each element is designated by a chemical symbol as shown in the table of elements and in the periodic chart.

Energy is defined in physics as the capacity for doing work. It appears in many forms, as energy of motion (kinetic energy), gravitational energy, heat energy, nuclear or atomic energy, chemical energy, and so on. But it is always measured by the work which it does. It is measured, in other words, as the product of the amount of force exerted multiplied by the distance through which the force acts.

$$\text{Energy} = \text{Force} \times \text{Distance}$$

For example, one unit of energy, the foot-pound, is the amount of energy necessary to lift a 1-pound weight a vertical distance of 1 foot.

In scientific work a great many other units are used to express quantities of energy, the fundamental unit of the metric system being 1 erg. The following table gives some of the commonly used energy units, arranged in order of size, and the number of ergs contained in each:

Energy unit	Equivalent in ergs
Electron-volt.....	1.60×10^{-12}
Erg.....	1.00
Foot-pound.....	13.56 million
Gram-calorie.....	41.86 million
British thermal unit (B. t. u.).....	1.05×10^{10}
Horsepower-hour.....	2.68×10^{13}
Kilowatt-hour (1.341 horsepower-hours).....	3.60×10^{13}

¹ $10^{-12} = 1$ divided by 1,000,000,000,000 (i. e., 1 followed by 12 zeros). $10^{-4} = 1$ divided by 10,000, etc.

The energy released on fission of a single uranium atom is 200 million electron volts $= 3.2 \times 10^{-4}$ ergs. Therefore, to get one kilowatt-hour of energy it is necessary to bring about the fission of:

$$\frac{3.60 \times 10^{13}}{3.2 \times 10^{-4}} = 1.12 \times 10^{17} \text{ atoms.}$$

Since there are 11.6×10^{23} uranium atoms in a pound, the fission of the uranium atoms in one pound of uranium brings about the release of 10.4 million kilowatt-hours of energy.

The total electrical energy developed in the United States in 1939 was 1.61×10^{10} kilowatt-hours, which is the amount of energy released by fission of:

$$\begin{aligned} \frac{1.61 \times 10^{10}}{1.04 \times 10^7} &= 1.55 \times 10^3 \text{ pounds} \\ &= 7.75 \text{ tons of uranium} \end{aligned}$$

Fission, a particular kind of disintegration of an atomic nucleus. It is the release of energy in fission which makes the explosion in the atomic bomb. Fission was first realized in late 1938 by Otto Hahn and Strassmann (German). In the fall of 1945, Otto Hahn was awarded the Nobel Prize for this discovery.

In fission, the nucleus is stimulated by the capture of a neutron which strikes it. Immediately, or sometimes with a slight delay, the nucleus becomes unstable, breaks into two main fragments which are nuclei of elements of medium atomic weight, and spills out several neutrons.

The atomic nuclei produced as fragments and the several neutrons rush apart at high speed from the point where the fission occurred. The neutrons, being uncharged, move rather freely through solid matter, but the nuclear fragments are quickly brought to rest by colliding against other atoms of the material in which the fission occurred.

Of the elements occurring in nature, only uranium, thorium, and protoactinium are now known to be capable of undergoing fission.

Gamma ray, a nonmaterial short-wave radiation emitted by some radioactive atoms. It is of the same general nature as the X-rays produced by a high voltage X-ray tube. Gamma radiation resembles X-radiation and ordinary light in being related to electromagnetic waves, but differs from other atomic radiations in that it comes from the nucleus of the atom rather than from the electrons outside the nucleus which are the source of light and X-rays.

Heavy hydrogen.—See deuterium.

Heavy water, water in which all or nearly all of the hydrogen is of the heavy isotope called deuterium. In ordinary water only about one part in 5,000 of the hydrogen is deuterium. The preparation of heavy water from ordinary water is an expensive separation process, mostly based on electrolysis of water by a method originated in the United States by Washburn, of the National Bureau of Standards.

Since most of the weight in a water molecule is due to the oxygen, doubling the weight of the hydrogen only changes the molecular weight from 18 for ordinary water to 20 for heavy water. Since heavy water molecules are of practically the same size as ordinary water molecules, heavy water is about 10 percent more dense than ordinary water.

Heavy water is useful as a moderator in certain special forms of the uranium pile.

Ionization, the process by which an atom which is ordinarily electrically neutral acquires an electrical charge. For example, in electrical discharges, as in electric arcs, neon signs, and the like, some of the atoms lose one or more of the outer electrons and are left with a net positive electric charge. Atoms can be ionized by absorption of light or absorption of X-rays or as a result of being struck by an electron. An atom thus ionized is called an *ion*.

Isotope, a species of an element in which the atoms are of uniform atomic weight. Most chemical elements occur as a mixture of several isotopes, i. e., as a mixture of atoms which are alike in chemical properties but fall into several groups according to weight. For example, chlorine is a mixture of two kinds of chlorine atoms having rough atomic weights of 35 and 37. Uranium occurring in nature is a mixture of U-235, an isotope with weight 235, U-238, an isotope with weight 238, and a very minute amount of an isotope with weight 234. In the symbol designating a particular isotope, the rough atomic weight is usually written in the symbol thus: C-135, C-137, U-235, U-238. (See, also, *atom* and *nucleus*.)

Isotope separation methods (used in separating U-235 from U-238). Because *isotopes* of the same element have almost identical physical properties and identical chemical properties, the problem of separating them from one another is extremely difficult. Several methods developed in the laboratory before the war were extended to full-scale factory production to obtain uranium for the atomic bomb project. All of the plants so developed were constructed at Oak Ridge, Tenn.

(a) *Mass-spectrograph method*.—In this method the material, some volatile compound of uranium, is passed as a vapor into an electric arc in a vacuum tank. This *ionizes* the uranium atoms (leaves them positively charged by knocking off one or more of the neutralizing electrons outside the nucleus). The ionized atoms (called ions) are then accelerated by application of high voltage. The whole tank is placed between the poles of a large electromagnet which causes the ions to move in circular paths, the radii of which depend on the mass of the ions. The ions of two isotopes of uranium, U-235 and U-238, move in paths of slightly different radii and so can be collected in separate containers.

For the atomic bomb project this method was developed at the University of California.

(b) *Diffusion method* depends on the fact that when a mixture of gases is allowed to diffuse through a membrane, the molecules of lighter weight get through more rapidly than the heavy ones, resulting in a partial separation of the mixture. Actually, when the gases are as similar in weight, as volatile compounds containing

the two *isotopes* of uranium, the degree of separation attained by one passage through a membrane is exceedingly minute. In order to achieve a useful degree of separation it is necessary to arrange for the gas to be diffused successively through many hundreds of membranes.

The research for this method was carried on in New York City at Columbia University.

(c) *Thermal diffusion method* depends on the fact that when a gaseous or liquid mixture is maintained under conditions where one part of it is hot and another cold, there is a partial separation of the mixture, with the differences in composition corresponding to the differences in temperature. This is also a very minute effect and arrangements must be made to augment the effect by repetition of the process.

The research for this method was conducted in Washington at the Naval Research Laboratory.

Mass-energy equivalence. This fundamental proposition, enunciated by Einstein in 1905 as one of the important practical consequences of the theory of relativity, states that when anything gives off energy it also loses weight or mass.

By the formula given by Einstein for this equivalence, the complete destruction of 1 pound of mass would be accompanied by the release of 10.66 billion kilowatt-hours of energy. (In the units used in pure physics, the destruction of 1 gram of mass is equivalent to the release of 9×10^{20} ergs of energy.) The size of this figure can be seen by comparison with the total electric power production in the United States which, in 1944, amounted to a little over 279 billion kilowatt-hours, the equivalent in mass, according to this formula, of 26 pounds.

This law is presumably true in all cases, but in the ordinary burning of a fuel the loss in mass is too small to be observed. In the releases of atomic energy produced thus far, which are millions of times greater for the mass of materials involved than in ordinary fuel combustion, it must be remembered that less than 1 percent of the total mass of material involved is actually consumed.

Mass number. This is another term for the *rough atomic weight*. It tells the total number of protons and neutrons in the nucleus. It should not be confused with atomic number, which gives at once the number of protons in the nucleus and the number of electrons outside the nucleus.

Moderator. This is the name given to any material used for the purpose of slowing down the average speed of a group of neutrons, by means of impacts of the neutrons with the atomic nuclei in the material of the moderator. It is essential that the nuclei of the atoms in the moderator do not absorb or capture the neutrons but merely act as buffers to slow them down and absorb part of their energy. The moderator is an important constituent of the energy- and plutonium-producing uranium pile. Thus far graphite has been used most frequently, although it must be specially manufactured to avoid contamination by certain elements, especially boron, which strongly absorb neutrons. Since the neutrons lose energy by elastic impacts with the nuclei in the moderator it is desirable to have a material of low atomic

weight. Because ordinary hydrogen absorbs too many neutrons, ordinary water is ineffective. Heavy hydrogen (deuterium) in the form of heavy water is good, although its extraction from ordinary water is an expensive process. Metallic beryllium is also a suitable moderator.

Neptunium, a new chemical element not occurring in nature, whose atomic number is 93. It is produced in the uranium pile as an element intermediate in the process of making plutonium. When a U-238 atom in the pile captures a neutron, it becomes U-239 which is radioactive, emits a beta-particle, and is thus transformed into Np-239. This kind of neptunium is also radioactive and emits another beta-particle whereby it is transformed into Pu-239, plutonium, the fissionable material used in making atomic bombs.

Neptunium, like plutonium, was discovered by Segre, Seaborg, Kennedy, and Wahl, at Berkeley, Calif., in 1940.

Neutron, a particle with no electric charge, but with a mass approximately the same as that of the proton. In nature, neutrons are locked up in the nucleus of an atom, but they can be knocked out in various kinds of atom-smashing experiments. The number of neutrons in a particular nucleus is found by subtracting the atomic number from the rough atomic weight.

Neutrons were discovered in 1932 by Chadwick (British). He obtained them in a free state by bombarding beryllium atoms with alpha-particles from radium. This knocked the neutrons out of the beryllium nuclei and is still a useful laboratory way of producing streams of free neutrons of low intensity.

Neutrons play an especially important role in the practical utilization of atomic energy because when a uranium atom undergoes fission through the capture of a neutron, several more neutrons are produced which continue the process by the mechanism of a chain reaction.

Because they are electrically neutral, neutrons can move rather freely through most solid materials. They are, however, scattered by impact with the nuclei so that they move through matter by diffusion rather than by direct forward motion. Likewise, they are absorbed to some extent, the free neutrons being captured by nuclei to form new isotopic atoms which are in some cases radioactive.

The ability of nuclei thus to capture neutrons varies enormously from one atomic species to another and depends very greatly on the speed of the neutrons. Some substances are almost "transparent" to neutrons, others almost "opaque." There is no known substance which will act like a wall for neutrons and bounce back all the neutrons that strike it in the way that a steel boiler wall bounces back the molecules of steam that strike it.

Nucleus, the central part of the atom, which makes up most of the weight of the atom and is charged with positive electricity. Atomic nuclei are, it is now believed, made up of two kinds of fundamental particles, *protons* and *neutrons*.

The total number of particles of both kinds in the nucleus is given by the rough *atomic weight*. The number of protons is given by the *atomic number*. The number of neutrons can thus

be found by subtracting the atomic number from the atomic weight. For example, in uranium-238, the total number of protons and neutrons is 238. The number of protons alone, given by the atomic number of uranium, is 92. Hence, by subtraction, the number of neutrons is $238 - 92 = 146$.

In the atoms of certain elements the nuclei, while all having the same number of protons, i. e., the same atomic number, differ as to atomic weight (see *isotopes*). For example, most hydrogen atoms have a single proton for a nucleus. Consequently, hydrogen is said to have an atomic weight of 1. But there are hydrogen atoms with a nucleus compounded of one proton and one neutron. These heavier atoms can be separated from the lighter, more normal hydrogen atoms to make heavy hydrogen (deuterium), a material with the same chemical properties as hydrogen, but with a rough atomic weight of 2. Some elements are represented by atoms of many different weights. Every atom of mercury, for instance, has 80 protons in its nucleus, but with respect to atomic weight, it may fall into any one of seven different varieties, having the rough weights: 196, 198, 199, 200, 201, 202, and 204.

At the time progress in fundamental science was interrupted by the war, the basic problem in physics was to learn the nature of the forces which hold together the particles in the nucleus. Evidently, forces of a new kind must play a role here for the neutrons, being neutral, are not affected by electrical charges, and the protons, being all positively charged, would fly apart if their mutual electrical repulsions were not overcome by some special nuclear attractions. The nature of these forces is as yet not fully known.

Periodic table, an arrangement of the chemical elements, first made by Mendeleeff (Russian), to show resemblances among them with respect to their chemical properties.

In this table the elements are arranged in rows by order of atomic number. When this arrangement is made, it is found that the elements in certain groups and in certain vertical columns of the table are those exhibiting similar chemical properties. For example, elements in right-hand column of the table—helium, neon, argon, etc.—are all inert gases.

The reason for this periodic recurrence of similar chemical properties in the elements arranged in this way is given by the theory of the electronic structure of the *atom* developed by Bohr (Danish) and perfected by Pauli (Austrian). For his contribution to this work, Pauli, now at the Institute for Advanced Study in Princeton, N. J., was awarded the Nobel Prize in physics in November 1945.

Pile. This term refers to the particular arrangement used to produce a chain reaction with uranium for the purpose of producing plutonium or for getting heat energy for generation of power.

The original pile was built on the campus of the University of Chicago and first operated on December 2, 1942. It consisted of blocks of graphite interspersed with lumps of metallic uranium, the whole being roughly in the shape of a sphere containing 12,400 pounds of uranium metal.

Subsequently several other piles were built for special purposes prior to the construction of the large plutonium production plant at Hanford, Wash.

The underlying idea of the pile may be explained simply. The neutrons released in fission have such high speeds that they are not very effectively captured again to produce further fissions and to carry on the chain reaction. Only neutrons at very low speeds will produce fission; those with high energy tend to pass right through the nuclear targets at which they are aimed without splitting them. To reduce the speed of the neutrons it is necessary for them to diffuse in some material of low atomic weight where they will lose energy by elastic impacts with the atoms of this material.

In the pile this moderator material is kept in layers or lumps separate from the uranium. This is necessary because uranium has a strong tendency to absorb neutrons of medium speed in a way that does not result in fission. The neutrons which become effective are those which are slowed below this speed in the moderator and diffuse back into the uranium to produce more fission.

Since their primary object was plutonium production and not heat, the piles that have been built thus far have been kept at relatively low temperatures either by dry-air cooling or by water cooling pipes. For power production it will be necessary to work out engineering designs which permit the piles to operate at a high temperature to generate steam for use in steam turbines driving electric generators.

The details of pile design will vary greatly, depending on the primary purpose of the pile, the moderator material which is chosen, and depending on whether natural uranium or uranium with enriched U-235 content is used. In operation a pile becomes enormously radioactive, so that all work connected with it must be done by remote control, behind very thick absorbing walls to avoid dangerous burns to the operating personnel. The whole future of the peacetime use of atomic energy depends on the success with which piles can be developed for various special purposes.

Plutonium, a new chemical element not occurring in nature, whose atomic number is 94. It was discovered by Segre, Seaborg, Kennedy, and Wahl working at Berkeley, Calif., in 1940. Plutonium (symbol: Pu-239) is used in making atomic bombs, the large plant at Hanford, Wash., having been designed solely for its production. This highly radioactive element is formed as a result of two successive beta-particle transformations from U-239 which itself is produced in the uranium pile (see *neptunium*).

Power.—A distinction should be made between *power* and *energy*. Power differs from *energy* in that it brings in the element of time. The faster a given amount of work is to be done, the more power is required. The amount of energy required is the same, regardless of the time in which the work is done.

The simplest direct unit of power is the foot-pound per second, which is the amount of power needed to lift a weight of 1 pound vertically at a speed of 1 foot per second. The most familiar electrical power unit is the kilowatt.

The relations between the common power units are as follows:

Unit:	Number of foot-pounds per second
Watt-----	0. 73756
Horse power-----	550.
Kilowatt (1,000 watts)-----	737. 56

It is important to recognize distinctly the difference between a *kilowatt of power* and a *kilowatt-hour of energy*. A kilowatt-hour measures the work done by a device delivering a kilowatt of power for 1 hour. To say that the installed capacity of a power generating station is 40,000 *kilowatts* is to say that it can deliver energy continuously at that rate, and does not give the total amount of energy delivered in any given period of time.

Since 1 pound of uranium undergoing fission releases 10.4 million kilowatt-hours of energy, it follows that the utilization of 10 tons per year of uranium would provide a steady output of power of:

$$\frac{10 \times 2000 \times 10.4 \times 10^6}{365 \times 24} = 23.7 \text{ million kilowatts}$$

Protoactinium, a heavy element of atomic number 91, capable of undergoing fission on neutron capture. This element is extremely rare, and for this reason will probably not find practical application in atomic energy developments.

Proton, a small particle with a positive electric charge equal numerically to the negative electric charge of the electron. A single proton makes up the entire nucleus of the ordinary hydrogen atom. The nuclei of atoms of other substances contain a number of protons given by the atomic number of the element. The mass of the proton is so small that it takes 2.72×10^{26} of them to make 1 pound. The mass of the proton is, however, 1,820 times greater than that of the electron.

Radioactivity, a property of certain elements which causes their atomic nuclei spontaneously to disintegrate, gradually transmuting the original elements into others of different chemical properties. The radioactive atomic species occurring in nature include all elements whose atomic number is greater than that of lead. Since 1930, physicists have succeeded in transmuting nearly all of the chemical elements into radioactive forms by artificial bombardments. Many such materials are also produced as fission products.

The radiations emitted by radioactive materials have proved very useful in the study and treatment of cancer and other tumorous diseases, and in medical diagnosis and therapy generally. Rapid developments in this field may be expected now that abundant supplies of radioactive materials can be provided by uranium piles.

The rate at which radioactive materials transform is measured by time intervals, called the half-life; in the first half-life, the amount of material left unchanged is half the original amount; in the next half-life interval, half the remaining amount, or one-fourth the original amount, remains. The half-life of different materials varies widely: for uranium-238 it is 4.67 billion years; for radium it is 1,690 years; for polonium-210 it is 136 days,

while for a special isotope of polonium (214) the half-life is only about a millionth of a second.

The radiations emitted by radioactive materials are of three types, *alpha-particles*, *beta-particles* and *gamma rays*. When an alpha-particle is emitted from the nucleus of an atom, the atomic weight is diminished by 4 and its atomic number by 2. For example, when U-238 emits an alpha-particle the remaining nucleus becomes an isotope of thorium, Th-234. When a beta-particle is emitted the atomic number is increased by 1, since the beta-particle carries away a negative electric charge, but the rough atomic weight is unchanged because the mass of an electron is so small. Thus, the thorium isotope Th-234 produced from U-238 is itself radioactive, emits a beta-particle and becomes Pa-234, an isotope of protoactinium. Emission of gamma radiation by an element does not change its atomic number or atomic weight but occurs in close association with the emission of alpha- or beta-particles.

Thorium, a heavy element of atomic number 90, which is capable of undergoing fission on capture of a fast neutron. Thorium has thus far not found application in atomic power production.

Uranium, the critical element that is used in the atomic bomb and in atomic power production because of the ability of its atoms to undergo fission when it absorbs neutrons.

Uranium has an *atomic number* of 92 and consists mostly of two *isotopes* of rough *atomic weights* 238 and 235. The U-238 makes up 99.3 percent and the U-235 about 0.7 percent of the natural metal. Minute amounts of U-234 are also found in natural uranium.

Uranium was discovered in the year 1789 as an element occurring in the mineral pitchblende. It was not prepared in metallic form until 1841. The discovery of its natural radioactivity was made in 1896 by Henri Becquerel and 2 years later the much more intense radioactivity of radium was discovered by Pierre and Marie Curie.

Since radium always occurs in nature in association with uranium-bearing minerals, most prospecting for uranium heretofore has been for the primary purpose of finding radium. Some uranium has been used in certain alloy steels; also, uranium compounds find application as pigments in the ceramic and glass industries. Prior to the discovery of fission, however, no very important uses for uranium had been discovered.

Natural deposits.—The most important uranium mineral deposits are in Jachymov, in Czechoslovakia, in Colorado, in the Belgian Congo, and at Great Bear Lake in Canada. There are also important deposits in Tjuja-Mujun, Ferghana, East Turkestan, a region belonging to the Union of Soviet Socialist Republics. In 1923, it was estimated that the uranium content of these deposits amounts to 60 tons. Other deposits, widely distributed throughout the world, are not rich enough to be worked at present in competition with the main deposits.

In most minerals there are 2.8 million grams of uranium for every gram of radium.

In the mines of Czechoslovakia and also of the Belgian Congo the average yield of radium is about 0.1 gram radium per (metric) ton of ore.

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——— A short history of chemistry. New York, The Macmillan co., 1937. 386 p. QD11.P3

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Pennsylvania, University. *Bicentennial conference*. Nuclear physics, by Enrico Fermi [and others] . . . Philadelphia, Univ. of Pennsylvania press, 1941. 68 p. QC173.P37

Includes bibliographies.

Contents: Reactions produced by neutrons in heavy elements, by Enrico Fermi.—Proton-proton scattering, by Gregory Breit.—The moments of the light nuclei, by I. I. Rabi.—Nuclear masses and binding energies, by E. P. Wigner.—The mesotron and the quantum theory of fields, by J. R. Oppenheimer.—Nuclear physics and interatomic arrangement, by J. H. Van Vleck.

Planck, Max. The philosophy of physics. New York, W. W. Norton, 1936. 128 p. QC6.P625

The author of the quantum theory summarizes his philosophy.

Pollard, Ernest C. and William L. Davidson, jr. Applied nuclear physics. New York, J. Wiley & sons, inc.; London, Chapman & Hall, limited, 1942. 249 p. QC173.P56

"References" at end of most of the chapters.

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Potter, Robert D. Is atomic power at hand? Scientific monthly (N. Y.) June 1940, v. 50: 571-574. Q1.S817 v.50

Five years ago the author wrote: "It should be realized by all atomic power zealots, however, that even if the chain reaction in uranium fission were conclusively proved and atomic power were a fact today, there would still be enormous engineering problems to be conquered in constructing useful machines that could utilize atomic power."

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Roberts, R. B., R. C. Meyer, and L. R. Hafstad. Droplet fission of uranium and thorium nuclei. Physical review (Lancaster, Pa.) Feb. 15, 1939, v. 55: 416-417. QC1.P4 v.55

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Rovner, Leopold. Geiger counters: atomic-particle and photon counters of the gas-discharge type. *In*: Medical physics, ed. by O. Glasser, Chicago, Ill. 1944: 486-495. QH505.N3

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Rowland, John. Understanding the atom. London, V. Gollancz, ltd., 1938. 93 p. QC173.R785

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——— Radioactivity and atomic theory. *In* Smithsonian institution. Annual report, 1936. Washington, 1937. p. 161-175. Q11.S66 1936

"Sixteenth Faraday lecture, delivered at the Royal institution on Feb. 12, 1936. Reprinted . . . from the *Journal of the Chemical society*, April 1936."

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——— Transmutation of matter. *In* Smithsonian institution. Annual report, 1938. Washington, 1939. p. 201-208. Q11.S66 1938

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———, James Chadwick and C. D. Ellis. Radiations from radioactive substances. Cambridge, The University press, 1930. 588 p. QC721.R94

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Seaborg, Glenn T. The four newest elements. *Chemistry* (Washington, D. C.) Dec. 1945, v. 19: 1-9. Serials div.

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Skilling, William T. Sunshine and the atomic bomb. The Scientific monthly (Washington, D. C.) Mar. 1946, v. 62: 211-218.

Soddy, Frederick. The interpretation of the atom. London, J. Murray, 1932. 355 p. QC173.S475

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Solomon, Arthur K. Why smash atoms? Cambridge, Mass., Harvard univ. press, 1940. 174 p. QC721.S68

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Speakman, James C. Modern atomic theory; an elementary introduction. New York, Longmans, Green & co.; London, E. Arnold & co., 1938. 207 p. QD461.S65

Bibliography: p. 198-199.

Stebbing, L. Susan. Philosophy and the physicists. London, Methuen and co., 1937. 295 p. Q175.S75

A philosopher interprets physics for the general reader.

Stones, G. B. The atomic view of matter in the 15th, 16th and 17th centuries. Isis (Cambridge, Mass.) June 1928, v. 10: 445-465. Q1.I7 v.10

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Taylor, Lloyd W. Physics, the pioneer science. Boston, Houghton Mifflin co., 1941. 847 p. QC21.T33

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Timm, John A. Putting tagged atoms to work. Journal of chemical education (Easton, Pa.) Feb. 1943, v. 20: 54-59. QD1.J93 v.20

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Turner, Louis A. Nuclear fission. Review of modern physics (Lancaster, Pa.) Jan. 1940, v. 12: 1-29. QC1.R4 v.12

Excellent general review. Has a good bibliography.

Tuve, M. A. The forces which govern the atomic nucleus. Scientific monthly (New York) Oct. 1938, v. 47: 344-363. Q1.S817 v.47

Popular account of the fundamental researches carried on in the laboratories of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington.

——— The new alchemy. Radiology (Syracuse, N. Y.) Aug. 1940, v. 35: 174-183. RC78.A3 v.35

A brief but very good elementary lecture on the formation of radioactive isotopes.

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Wells, W. H. Production of high energy particles. A review of recent progress in the development of extremely high voltages. Journal of applied physics (Lancaster, Pa.) Nov. 1938, v. 9: 676-689. QC1.J83 v.9

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B. THE ATOMIC BOMB: ITS DEVELOPMENT AND USE

Armagnac, Alden P. What's behind atomic power. Popular science (N. Y.) Oct. 1945, v. 147: 69-73+. AP2.P8 v.147

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Canada mines uranium in Arctic. Life (Chicago) v. 20, Jan. 14, 1946: 21-26.

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Contents: Clinton—a monument to teamwork, by Col E. H. Marsden.—Building the Hanford plutonium plant, by Col. T. F. Matthias.—Men and materials for a \$427,000,000 job.—Process buildings over faulted rock, by L. Kerr and P. Brown.—Thermal diffusion plant built rapidly, by Lt. Col. M. C. Fox.—Largest of the atom-bomb plants, by J. F. Hogerton.—Organization set-up for \$5,000,000 a month pay roll, by E. L. Jones.—Building a power plant in 10 months, by J. D. Watson.—Compacted fill equals natural ground, by J. D. Watson and O. R. Bradley.—Surveying for fast construction, by H. R. Kornberg.—Building a city from scratch, by E. A. Wende.—Water supply and sewage works for the atomic bomb city, by G. E. Crosby and P. B. Streander.

de Seversky, Alexander P. Atomic bomb hysteria. Reader's digest (Pleasantville, N. Y.) v. 48, Feb. 1946: 121-126.

AP2.R255 v.48

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Einstein, Albert. The meaning of relativity. Princeton, N. J. Princeton univ. press, 1945, 135 p.

QC6.E43 1945

A new edition of work published in 1921.

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F., D. G. The technical basis of atomic explosives. *Electronics* (N. Y.), Oct. 1945, v. 18: 109-113. QC544.V3A3 v.18

Fuller, J. F. C. The age of annihilation. The atomic bomb and warfare of the future. *Army ordnance* (Washington, D. C.) Jan.-Feb., 1946, v. 30: 34-39. UF1.A6 v.30

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Gustavson, Reuben G. Story behind the atomic bomb. Team-work among scientists. *Vital speeches* (N. Y.) Oct. 1, 1945, v.11: 762-767. PN6121.V52 v.11

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Harkins, William D. The neutron, the intermediate or compound nucleus and the atomic bomb. *Science* (Washington, D. C.) Mar. 8, 1946, v. 103: 289-302. QI. S.35 v.103

Hawley, Gessner G. and Sigmund W. Leifson. Atomic energy in war and peace. New York, Reinhold publ. corp., 1945. 211 p. QC173.H36

At Hiroshima and Nagasaki. *National review* (London) Oct. 1945, v. 125: 277-279. AP4.N25 v.125

* Editorial with extracts from reports of destruction done at Hiroshima and Nagasaki written by Mr. Burchett of the *Daily Express*.

Jaffe, B. How the bomb came to be. *New republic* (N. Y.), Sept. 17, 1945, v. 113: 344-347. AP2.N624 v.113

A very brief history of the "Manhattan Project."

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Kramer, Andrew W. The development of atomic energy. *Power plant engineering* (Chicago) Oct. 1945, v. 49: 95-100. TJ1.P77 v.49

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Laws of matter, up-to-date. Chemistry (Washington, D. C.) v. 19, Oct. 1945: 22-26. Serials div.

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Ley, Willy. Inside the atom. Natural history (N. Y.) Oct. 1945, v. 54: 350-358. QH1.N13 v.54

A master of simplification takes the reader on an atomic tour. Illustrated with striking diagrams.

Marshall, Joseph. How we kept the atomic bomb secret. Saturday evening post (Philadelphia) v. 218, Nov. 10, 1945: 14-15. AP2.S2 v.218

The story of the war's greatest secret and of some of the people who helped keep it.

Neuberger, Richard L. Arctic cradle of the atom. Liberty (N. Y.) v. 22, Nov. 24, 1945: 26-27+ AP2.L541 v.22

Description of the great pitchblende deposits on Great Bear Lake in Canada's Northwest Territories.

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A popular account of atomic energy and its implications by the Science Editor of the New York Herald Tribune.

Oster, Gerald. Research on atomic energy in the U. S. S. R. American review on the Soviet union (N. Y.) Feb. 1946, v. 7.

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Robertson, John K. Atomic artillery, modern alchemy for everyman. New York, D. Van Nostrand co., inc., 1937. 177 p. QC173.R6

Revised 1945 with title: Atomic artillery and the atomic bomb. 173 p.

Smyth, Henry De Wolf. A general account of the development of methods of using atomic energy for military purposes under the

auspices of the United States government, 1940-1945. Washington, D. C. [U. S. Govt. print. off.] 1945. 182 p. UF767.S52

"Written at the request of Major General L. R. Groves, United States army. Publication authorized as of August 1945."

"Sample list of reports": p. 182.

This report (now commonly known as the Smyth report) was made public for use by radio commentators after 9:00 P. M. E. W. T., Saturday, August 11, 1945, and for the press on Sunday, August 12, 1945. In its original form the report was issued as mimeographed material in a very limited edition. It was republished by the U. S. Govt. Printing Office (see above) and also by the Princeton University Press. This latter has the title: Atomic energy for military purposes; the official report on the development of the atomic bomb under the auspices of the United States government, 1940-1945. There are 264 pages and a number of illustrations. These photos are absent from the report printed in the Govt. Printing Office. In addition the Princeton version has some expanded sections dealing with health precautions.

A special reprint has been published in England by His Majesty's Stationery Office for distribution in Gt. Britain.

Spaatz, Carl A. Air power in the atomic age. Collier's (Springfield, O.) v. 116, Dec. 8, 1945: 11-12. AP2.C65 v. 116

General Spaatz discusses a future war fought with super planes and atomic bombs. Defense must be based upon offensive readiness.

The 36 hour war. Arnold report hints at the catastrophe of the next great conflict. Life (Chicago) v. 19, Nov. 19, 1945: 27-35.

AP2.L547 v.19

Thursfield, H. G. Science and sea warfare. National review (London) Nov. 1945, v. 125: 379-385. AP4.N25 v.125

Written before the Navy officially announced its proposed tests of the atomic bomb, the author analyzes the problems posed and points out that the results of the experiments will be doubtful and productive of little new information.

U. S. Army air forces. Third report of the commanding general of the Army air forces, to the secretary of war, November 12, 1945. Washington, U. S. Govt. print. off., 1945. 72 p. GPRR

This is General Arnold's report covering the period 27 February, 1945 to 12 November, 1945. Includes discussion of the atomic bomb and of the influence of atomic energy on the future of air power. Has many illustrations and maps.

Washington university, St. Louis. The contribution made by Washington university in the study and development of atomic energy. [St. Louis, 1945] 20 p.

Contents: I saw the birth of atomic power, by Arthur H. Compton. Atomic power in war and peace, by Arthur H. Compton. The role of Washington University in the development of the bomb.

Wickware, Francis S. Manhattan Project. Its scientists have harnessed nature's basic force. Life (Chicago) v. 19, Aug. 20, 1945: 91+. AP2.L547 v.19

An eye witness account of the first test in New Mexico.

Yates, Raymond F. Atom smashers: story of discovery. New York, Didier, 1945. 182 p. QC173.Y3

"In simple non-technical language the author has told the story of our knowledge about atoms from the days of the early Greek philosophers to the present age of cyclotrons and atomic bombs."

C. USES OF ATOMIC ENERGY IN INDUSTRY AND MEDICINE

The atom, new source of energy. Summary by the editorial staff of the McGraw-Hill publishing co. Electronics (N. Y.) Sept. 1945, v. 18: 8 p. insert between p. 88-90. QC544.V3A3 v.18

Also appears in Chemical and metallurgical engineering (N. Y.) Sept. 1945, v. 52: 94-100. TN1.M45 v.52

Simple yet authoritative discussion of how atom splitting releases energy, creating and isolating the high-power atoms and what to expect from atomic energy. Text is amplified by many line drawings.

Brown, J. M. Nuclear physics safety; accident prevention at Clinton engineering works, Tennessee Eastman corporation. Safety engineering (Albany, N. Y.) v. 90, Nov. 1945: 36-41.

TH9201.A1S3 v.90

An account of the safety measures used and developed at the Oak Ridge plants.

Condon, E. U. Physics gives us—nuclear engineering. Westinghouse engineer (Pittsburgh) Nov. 1945, v. 5: 167-173. Serials div.

Popular account of nuclear fission with special reference to peacetime applications. Includes glossary and chronology.

Darrow, Karl K. Beginnings of nuclear physics. Electrical engineering (N. Y.) Sept. 1945, v. 64: 315-318. TK1.A61 v.64

A lucid discussion of nuclear physics and its implications to the engineer.

Davis, G. H. Splitting the mighty atom: New sources of world energy, diagrammatic drawings. Illustrated London news (London) Aug. 18, 1945, v. 207: 182-183. AP4.I3 v.207

Davis, Harry M. When can the atom be put to work. New York Times magazine, Dec. 1945, p. 10.

DeMent, Jack A. and H. C. Dake. Uranium and atomic power, with appendix on the atomic bomb. Brooklyn, N. Y. Chemical publ. co., inc., 1945. 343 p. QD181.U7D4

"A comprehensive, practical and theoretical exposition of the uranium minerals, based on the chemistry of uranium, and including the possibilities of atomic power." This book is essentially a reprint of the edition of 1941 with a brief appendix on the atomic bomb.

Dietz, David. Atomic energy in the coming era. New York, Dodd, Mead & co., 1945. 184 p. QC173.D5

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Evans, Robley. The medical uses of atomic energy. Atlantic monthly (Boston) v. 177, Jan. 1946: 68-73. AP2.A8 v.177

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Failla, G. Biological effects of ionizing radiations. Journal of applied physics (Lancaster, Pa.) Apr. 1941. v. 12: 279-295.

QC1.J83 v.12

"Nuclear physics and cancer have been closely associated for about forty years. But the association now has more points of contact and it is already evident that cancer research, as well as therapy will greatly benefit from the new developments in nuclear physics."

5000 new products and procedures from atomic-bomb research. Electrical engineering (N. Y.) Oct. 1945, v. 64: 375-377.

TK1.A61 v.64

Forecast of benefits to American industry in new inventions, products and procedures resulting from Manhattan project.

Gamow, George. Atomic energy in cosmic and human life. New York, Macmillan co., 1946.

Announced for Mar. publication.

Goodman, Clark. The atomic competitor. American affairs (New York) Jan. 1946, v. 8: 59-60.

HC101.N317 v.8

Author believes that atomic energy will replace oil as a source of energy and that remaining oil resources will be used for chemical production rather than burned up for its power content.

——— Petroleum vs. plutonium. Oil and gas journal (Tulsa) Nov. 17, 1945, v. 44: 227-248.

TN860.04 v.44

A factual report to the petroleum industry which attempts to evaluate the present and future competition of atomic energy.

Hamilton, Joseph G. The application of radioactive tracers to biology and medicine. Journal of applied physics (Lancaster, Pa.) June 1941, v. 12: 440-460.

QC1.J83 v.12

"This report has attempted to describe the experimental technique employed in the application of radioactive tracers to metabolic studies in biology and medicine." General in nature and well illustrated.

Harrison, George R. Atoms in action. The world of creative physics. Rev. ed. New York, Garden City publ. co., 1944. 401 p.

QC28.H37 1944

A popular introduction to what physics is about. Well illustrated and it concludes with a list of additional readings.

Hevesy, G. and F. A. Paneth. Radioelements as indicators in chemical and biological research. Science progress (London) July 1937, v. 32: 38-48.

Q1.S79 v.32

An introductory essay by two British pioneers in this field.

How soon atomic energy? Scientific American (N. Y.) Nov. 1945, v. 173: 284-285.

T1.S5 v.173

Survey based on Smyth report and discussions with leading physicists. Concludes that power possibilities may come within a decade or two. Applications to medicine and scientific research sooner.

Hyatt, Robert M. The power of the atom. Public utilities fortnightly (Baltimore) Sept. 27, 1945, v. 36: 424-430. Law Library

Author agrees with view that while applications of atomic energy will prove amazing they will supplement rather than supplant existing power systems for some time to come.

Isard, Walter and Vincent Whitney. Industrial uses of atomic power. New republic (N. Y.) Dec. 17, 1945, v. 113: 829-831.

AP2.N624 v.113

The authors examine possibilities for early use of atomic energy. They conclude that "The Atomic Age—if we live to see it—will be the outgrowth of orderly, evolutionary development in the direction of a more ample economy."

Kramer, Andrew W. Atomic energy is here. Power plant engineering (Chicago) Sept. 1945, v. 49: 74-77.

TJ1.P77 v.49

Author warns: "Power plant engineers will do well not to ignore the possibility of atomic power."

——— Uranium and atomic energy. Power plant engineering (Chicago) Sept. 1945, v. 49: 78-84.

TJ1.P77 v.49

"The treatment here has been, of necessity, somewhat sketchy but it will provide a background against which this development can be considered. Further disclosures regarding the atomic energy development will be presented in future articles."

Loofbourow, John R. Borderland problems in biology and physics. Reviews of modern physics (Lancaster, Pa.) Oct. 1940, v. 12: 267-358.

QC1.R4 v.12

Remarkably complete review: Includes sections on isotopes as biologic tracers with references to 306 articles in the bibliography. Valuable as an introduction to this field.

Low, A. M. What next with the atom? Popular science (N. Y.) Oct. 1945, v. 147: 65-67+

AP2.P8 v.147

The author, a well-known British scientist predicts an age of miracles when the atom is finally brought under control for peacetime use.

Low-Beer, Bertram V. A., John H. Lawrence and Robert S. Stone. The therapeutic use of artificially produced radioactive substances. Radiophosphorus, radiostrontium, radioiodine, with special reference to leukemia and allied diseases. Radiology (Syracuse, N. Y.) Nov. 1942, v. 39: 573-597.

RC78.A3 v.39

A general review with an extensive bibliography.

McDermott, William F. Bringing the atom down to earth. Popular mechanics magazine (N. Y.) Nov. 1945, v. 84: 1-6+

T1.P77 v.84

Illustrated article on the possibilities of atomic power.

Roberts, R. B. and J. B. H. Kuper. Uranium and atomic power. Journal of applied physics (Lancaster, Pa.) Sept. 1939, v. 10: 612-614.

QC1.J83 v.10

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Shea, H. Gregory. Generation of atomic power from elements. Electronic industries (N. Y.) Oct. 1945. v. 4: 90-94.

TK161.E54 v.4

Discussion of the industrial possibilities of nuclear energy.

Sherman, Joseph V. Atomic age will dawn gradually. New industries may be created. However—Plan for federal control opposed. Barron's (N. Y.) v. 25, Oct. 8, 1945: 3. HG1.B3 v.25

Welch, Francis X. An "atomic era" for utilities? What steps can the public utilities take now or in the near future to put their house in order for the coming of the atomic age. Public utilities fortnightly (Baltimore) Sept. 13: 1945: v. 36: 349-361. Law Library.

Author makes seven general suggestions.

Williams, Clarke. Atomic power: next steps. 1: Bootlegging atomic-bomb materials. New republic (New York) Jan. 28, 1946, v. 114: 119-121. AP2.N624 v.114

A discussion of the feasibility of inspection by an atomic scientist.

"This is the first of a series of three articles on problems related to atomic power. The second article, by Dr. Alvin Weinberg, will discuss 'Peacetime Uses of Nuclear Power'."

D, CONTROL OF ATOMIC ENERGY

Angell, Norman. Human nature and the atomic age. Free world (N. Y.) Dec. 1945, v. 10: 74-76. D410.F78 v.10

Safety in the atomic age depends on the use of reason to control human nature.

——— Man and the atom. Free world (N. Y.) Sept. 1945, v. 10: 71-74. D410.F78 v.10

An exhortation to the use of reason in the atomic era.

The Association of Los Alamos scientists. Science (N. Y.) Dec. 14, 1945, v. 102: 608-609. Q1.S35 v.102

Announcement of an organization of scientists from the Los Alamos branch of the Manhattan District. Includes statement of aims.

The Association of Oak Ridge scientists; a letter to the Saturday review. Saturday review of literature (N. Y.) v. 28, Oct. 13, 1945: 24. Z1219.S25 v.28

Also in: Science news letter (Washington, D. C.) Oct. 20, 1945, v. 48: 250-252.

Atomic scientists speak out on the bomb.

Atom of discord. Editorial. The Economist (London) Nov. 24, 1945, v. 149: 737-738. HG11.E2 v.149

A discussion of the Truman-Atlee-King statement.

The atomic bomb—it's loaded. Editorial. American foreign service journal (Washington, D. C.) v. 22, Dec. 1945: 7-10+ JX1.A53 v.22

An analysis of the problems presented by atomic energy and its control. Discusses political and technical aspects.

Atomic energy and American policy. Official and unofficial pronouncements. International conciliation (N. Y.) Dec. 1945, no. 416: 749-823. JX1907.A8 no.416

Contents: Introduction by James T. Shotwell. I.—Official Statements. Statement on the atomic bomb, by President Harry S. Truman, August 6, 1945.—Statement on the atomic bomb, by Secretary of War Henry L.

Stimson, August 6, 1945.—President Truman's Message to Congress on the atomic bomb, October 3, 1945.—President Truman's foreign policy address, October 27, 1945. II.—Unofficial Statements. The atom and humanity, an address by Harold C. Urey, October 21, 1945.—From war to peace, an address by Harold E. Stassen, November 8, 1945.—Implementing and amending the charter, an address by James T. Shotwell, November 11, 1945.

Atomic energy in international and constitutional law. Lawyers guild review (Washington) Sept.–Oct., v. 5: 311–314. Law.

Report of the Committee on international law and relations, National Lawyers guild.

Atomic scientists of Chicago. The atomic bomb. Chicago, 1946. 62 p.

A compact but authoritative discussion of the atomic bomb and its implications. Includes illustrations, a glossary, and a brief reading list.

Baldwin, Hanson W. Atomic bomb responsibilities. Article introduced into the Record by Mr. Shipstead, Sept. 12, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4146–A4147.

J11.R5 v.91

Proposes: 1. Temporary retention of the atomic bomb secret; 2. Abolition of conscription; 3. Reduction of national armaments; 4. Rapid development of international police force; 5. Elimination of veto power; eventual outlawry of the atomic bomb.

Blackburn, Raymond. A British appeal on atomic energy. New republic (N. Y.) Nov. 19, 1945, v. 113: 663. AP2.N64 v.113

Pleads for concentration of effort on peacetime uses for atomic energy.

Bliven, Bruce. The bomb and the future. New republic (N. Y.) Aug. 20, 1945, v. 113: 210–212. AP2.N64 v.113

Bohr, Niels. A challenge to civilization. Science (N. Y.) Oct. 12, 1945, v. 102: 363–364. Q1.S35 v.102

“Let us hope that science, which through the ages has stood as a symbol of the progress to be obtained by common human striving, by its latest emphasis on the necessity of concord, may contribute decisively to a harmonious relationship between all nations.”

Boothby, Robert J. G. Drama of man in the atomic age. From a speech in House of Commons. American affairs (N. Y.) Oct. 1945, v. 7: 217–219. HC101.N317 v.7

Argues for repeal of veto power in UN before we can have effective control of the atomic bomb.

Borst, Lyle B. Statement on atomic energy before an informal meeting of Members of Congress held on Thursday, November 8, 1945. Introduced into the Record by Mr. Voorhis, Nov. 15, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A5283–A5284.

J11.R5 v.91

Speaks as representative of the Association of Oak Ridge Scientists and the Federation of Atomic Scientists.

Brodie, Bernard. Absolute weapon: atomic power and world order. New York, Harcourt, Brace and co., 1946.

Announced for April publication.

Brodie, Bernard. The atomic bomb and American security. New Haven, Yale univ., 1945. 28 p. Mimeographed. (Yale Institute of international studies. Memorandum no. 18)

Contents: Atomic bombs and the conduct of war.—Possibilities of counter measures.—Military role of the traditional armed forces.—Is the atomic bomb a deterrent from war?—The economics of atomic bomb production and use.—How secret is the atomic bomb?—The problem of control.

Bryson, Lyman. The threat of the atoms. New York, Columbia broadcasting system, Aug. 12, 1945. 4 p. Mimeographed.

Transcript of radio broadcast in "Problems of the Peace" series.

Bulletin of the Atomic bomb scientists of Chicago (Chicago, Ill.) Dec. 10, 1945, v. 1, no. 1. 6 p.

This bulletin published bi-weekly provides information and news on the progress of current activities in connection with controlling the atomic bomb and atomic energy.

Byrnes, James F. The Moscow tripartite agreement; the reconciliation of differences. Vital speeches (New York) Jan. 15, 1946, v. 12: 197-200. PN6121.V52 v.12

Text of radio address by the Secretary of State, reporting on the Moscow Conference, delivered on Dec. 30, 1945.

Can the atomic bomb be controlled? Editorial. Christian century (Chicago) Oct. 24, 1945, v. 62: 1196-1197. BR1.A45 v.62

Argues for a world commission to control atomic energy.

Carnegie endowment for international peace. Committee on inspection of raw materials of the Committee on atomic energy. A conference report on international inspection of radioactive mineral production. New York, Carnegie endowment for international peace, The Geological society of America, American institute of mining and metallurgical engineers, Feb. 1946. 15 p.

The challenge of the atomic bomb. Nation (N. Y.) Dec. 22, 1945, v. 161: 701-720. AP2.N2 v.161

Special supplement (pt. 2) to the Nation containing addresses delivered at the Annual Nation's Associates' Forum held at Hotel Astor, December 1-3.

Childs, Marquis. Congress hears the atomic facts. Editorial from the Washington Post introduced into the Record by Mrs. Helen Gahagan Douglas, Oct. 19, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4757-A4758. J11.R5 v.91

Comments on the testimony of Dr. Oppenheimer before the Kilgore Committee.

——— Control of atomic energy. Editorial from the Washington Post, Oct. 6, 1945. Introduced into the Record by Mr. Downey, Oct. 29, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4886-A4887. J11.R5 v.91

Believes we should move in the direction of sharing the secret of atomic power under adequate controls.

Coffin, Tristram. Transcript of broadcast on atomic energy hearings over the Columbia broadcasting system, Oct. 21, 1945. Introduced into the Record Oct. 24, 1945 by Mr. Downey. Congressional record, 79th Cong., 1st sess., v. 91: A4812-A4813. J11.R5 v.91

Condon, Edward U. Atomic bombs and the future. Power plant engineering (Chicago, Ill.) Sept. 1945, v. 49: 84-85. TJ1.P77 v.49

Author pleads for a world order and continuation of unrestricted and fundamental scientific research.

——— Atomic energy and the future. Will the next conflict be "The War of Pushbuttons?" Army ordnance (Washington, D. C.) Nov. Dec. 1945, v. 29: 393-396. UF1.A6 v.29

Dr. Condon envisages possibility of a pushbutton war and destruction of our civilization if international controls of atomic energy are not forthcoming.

Coulborn, Rushton. Determinism and atomic force. Phylon, the Atlanta university review of race and culture (Atlanta, Ga.) Dec. 1945, v. 6: 305-309. E185.5.P5 v.6

An analysis of causality in human affairs in the light of atomic energy.

Cousins, Norman. Modern man is obsolete. New York, The Viking press, 1945. 59 p. JX1954.C68

An enlarged version of the famous editorial published in the Saturday review of literature, August 18, 1945.

——— Sovereignty in an atomic age. Saturday review of literature (N. Y.) v. 28, Oct. 13, 1945: 22-24 Z1219.S25 v.28

The author argues that national sovereignty must go if we are to survive in this atomic age.

Culbertson, Ely. How to control the atomic threat. New York, Total peace, inc., 1945. 14 p.

Advocates that the Quota force plan be amplified for the control of the atomic bomb.

Davis, Harry M. The atomic bomb: the facts and the issue. New York Times magazine (N. Y.) Nov. 11, 1945: 5, 41.

AP2.N6575 1945

A summary of the problems posed to statesmen by the atomic bomb.

Defense in the atomic age: plans for big U. S. forces. Absence of proof that large armies and navies are obsolete. United States news (Washington) Sept. 28, 1945: 22-23. JK1.U65 1945

Douglas, Helen Gahagan. Keep atomic energy free. New republic (N. Y.) Mar. 18, 1946, v. 114: 366.

Drake, Francis V. Let's be realistic about the atom bomb. Reader's digest (Pleasantville, N. Y.) Dec. 1945, v. 47: 108-112.

AP2.R255 v.47

Outlawry of the atom bomb will not necessarily outlaw war. A Department of scientific warfare to provide for adequate defense now is essential.

Einstein, Albert. Einstein on the atomic bomb, as told to Raymond Swing. Atlantic monthly (Boston) Nov. 1945, v. 176: 43-45.

AP2.A8 v. 176

Dr. Einstein suggests that secret of the atomic bomb be vested in a world government and that the United States, Gt. Britain and Russia proceed to form this government.

Ellis, E. D. Atomic bomb, key to the international sanction. Current history (N. Y.) Oct. 1945, n.s. v. 9: 293-298.

D410.C82 n.s. v.9

Finletter, Thomas, and others. Problem of the year: control of the atom; a radio discussion. Chicago, University of Chicago press, 1946. 29 p. (University of Chicago round table Jan. 6, 1946. No. 407).

D410.U7 no.407

Speakers also included Grayson Kirk, Edward Levi, and Philip Morrison.

For peace by law—a communication. Article from the Washington Post, introduced into the Record by Mr. Voorhis, Oct. 16, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4671-A4672.

J11.R5 v.91

Statement signed by Justice Owen J. Roberts and others calling for a revision of the United Nations Charter.

Fosdick, Raymond B. The challenge: One world or *none*. We are in a race with our technologies; with our mounting capacities to destroy. New York Times magazine (N. Y.) Sept. 2, 1945: 8, 35-36.

AP2.N6575 1945

Fulbright, J. W. The effect of the atomic bomb on American foreign policy. Address delivered by Senator Fulbright at a meeting of the American foreign policy association in New York City on Oct. 20, 1945. Introduced into the Record by Mr. Fulbright, Oct. 29, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A5013-A5015.

J11.R5 v.91

The Senator believes that only by surrendering some of their sovereignty over armaments to the United Nations can the individual nations hope to survive in the world of the atomic bomb.

G, G. Science—before and after. American affairs (N. Y.) Oct. 1945, v. 7: 219-223.

HC101.N317 v.7

A discussion of *Science, the endless frontier* in the light of the atomic bomb.

Gilfillan, S. C. The atomic bombshell. Survey graphic (N. Y.) Sept. 1945, v. 34: 357-358.

HV1.S82 v.34

"New vistas of health and happiness stretch ahead of us—if mankind can learn to use for good, and not for destruction, the mind-numbing power we have unleashed."

Gordon, King. The bomb is a world affair. Nation (N. Y.) Nov. 24, 1945, v. 161: 541-543.

AP2.N2 v.161

Supports Stassen's position for control by the United Nations.

Groves, L. R. The atomic age. Address delivered at Lafayette College, Easton, Pa., Oct. 26, 1945. Introduced into the Record by Mr. E. C. Gathings, Nov. 1, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4991-A4993.

J11.R5 v.91

Atomic power must be developed as an instrumentality for human welfare or it will destroy us.

Gustavson, Reuben, Robert Hutchins and William Ogburn. Atomic force: its meaning for mankind. University of Chicago round table discussion no. 386. Chicago, Ill., Aug. 12, 1945. 17 p.
D410.U7 1945

Hass, H. B. The significance of atomic energy. School science and mathematics (Menasha, Wis.) Jan. 1946, v. 46: 1-6.
Q1.S28 v.46

International organization for peace is man's only hope author argues.

Hatch, Carl A. The atomic bomb. An address in the Senate, Nov. 2, 1945. Congressional record, 79th Cong., 1st sess., v. 91: 10486-10488. J11.R5 v.91

An address by Senator Hatch on what to do with the atomic bomb, with attendant debate.

Higinbotham, William. Suppose an atomic bomb exploded over Washington? The Washington post, Feb. 10, 1946.

Hill, David L., Dr. Rabinowitch and John A. Simpson. The atomic scientists speak up. Nuclear physicists say there is no secrecy in the atomic bomb and no defence against it. Life (Chicago) Oct. 29, 1945, v. 19: 45, 46, 48. AP2.L547 v.19

Statement by the Atomic scientists of Chicago.

Holloway, Vernon H. The atomic bomb, a world problem. New York, Congregational Christian churches, Council for social action, 1946. 16 p.

Hoyt, Palmer. Take the lid off the atom. Editorial in the Oregonian, Oct. 2, 1945. Introduced into the Record by Mrs. Helen Gahagan Douglas, Oct. 24, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4824-A4825. J11.R5 v.91

Objections to the May-Johnson bill.

Hutchins, Robert M. The atomic bomb versus civilization. Chicago, Human events, inc., 1945. 13 p. (Human events pamphlet no. 1).

A world community based on common understanding is our only hope for survival. Only education can bring about such understanding.

Huxley, Julian. Is war instinctive and inevitable? New York times magazine, Feb. 10, 1946: 7+ AP2.N6575

A biologist answers a fundamental question.

The Independent. Madison square garden crisis meeting [on atomic energy] Dec. 4, 1945. New York, Jan. 1946. 19 p. (Special issue of the Independent).

Includes extracts from addresses by Dr. Harold Urey; Professor Julian Huxley; R. J. Thomas; Secretary Henry Wallace; Senator C. W. Tobey and Colonel E. Carlson.

Jennings, John. The atomic bomb is the property of the American people, paid for by them, and it should be held for their protection, and not given away. Extension of remarks Oct. 17, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4692.

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Johnson, Alvin. Education in an atomic age. Saturday review of literature (N. Y.) v. 28, Sept. 15, 1945: 15.

Z1219.S25 v.28

Jordan, Virgil. Frame of the future for America. American affairs (N. Y.) Oct. 1945, v. 7: 191-200.

HC101.N317 v.7

Address on man's future in the Atomic era delivered at Rutgers university Sept. 13, 1945. To be published in book form by the Rutgers university press in January, 1946.

Kirchway, Freda. Russia and the bomb. Nation (N. Y.) Nov. 17, 1945, v. 161: 511-512.

AP2.N2 v.17

Advocates giving bomb secret to Russia.

Knox, Ronald A. God and the atom. New York, Sheed and Ward, 1945. 166 p.

BT1101.K73

Kraus, K. A. and M. E. Kraus. Fear in the atomic age. Saturday review of literature (New York) v. 29, Jan. 12, 1946: 13-15.

Z1219.S25 v.29

Strengthening of UN is urged together with elimination of veto power.

LaFarge, John. Control of atomic energy. America (N. Y.) Nov. 17, 1945, v. 64: 174-176

BX801.A5 v.64

Recommends formation of a special agency as part of UN for the control of atomic energy.

Laski, Harold J. Atomic energy and free enterprise. Commercial and financial chronicle (N. Y.) Dec. 6, 1945, v. 162: 2699.

HG1.C7 v.162

Society dominated by free enterprise cannot be trusted to keep the peace. Control of atomic energy by private interests would lead to further enslavement of mankind. Urges elimination of national sovereignty to end war.

Lindeman, E. C. Morality for the atomic age. Forum (N. Y.) Nov. 1945, v. 104: 231-233.

AP2.F8 v.104

A peace based on fear of the bomb is not enough. A new dynamic morality is required for the atomic age.

Lindley, Ernest. Controlling the atom. Editorial from the Washington Post, Sept. 24, 1945. Introduced into the Record by Mr. Downey, Oct. 29, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4886-A4887.

J11.R5 v.91

Discussion of some legislative proposals with special reference to that of Senator McMahon.

Ludlow, Louis. Remarks on the introduction of a resolution concerning the future of the atomic bomb, Sept. 5, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4054.

J11.R5 v.91

Advocates that UN ban atomic bomb forever as an instrument of war.

Lundberg, George A. Can science save us? Harper's magazine (N. Y.) Dec. 1945, v. 191: 525-531. AP2.H3 v.191

"We must not expect physical science to solve social problems. We cannot expect atomic fission to reveal the nature of the social atom and the manner of its control. If we want results in improved human relations we must direct our research at these problems."

McKee, Frederick G. Control of atomic energy. Free world (New York) v. 11, Jan. 1946: 40-41. D410.F78 v.11

Proposes formation of an International Atomic Energy Corporation to control energy, its production and use.

McKellar, Kenneth. The atomic bomb. An address in the Senate, Nov. 1, 1945. Congressional record, 79th Cong., 1st sess., v. 91: 10414-10416. J11.R5 v.91

Advocates outlawing of the bomb. Cites protocol for the prohibition of the use of poison gas as a precedent.

McMahon, Brien. Controlling atomic energy. Address by Senator McMahon on Sept. 25, 1945 and introduced by him into the Record October 18, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4722-A4723. J11.R5 v.91

Masters, Dexter and K. Way, eds. One world or none. A report to the public on the full meaning of the atomic bomb. Prepared by 17 world authorities on the subject. New York, McGraw-Hill, 1946. 79 p.

Contents: Introduction by A. H. Compton.—Foreword: Science and civilization, by N. Bohr.—1. If the bomb gets out of hand, by P. Morrison.—2. It's an old story with the stars, by H. Shapley.—3. Roots of the atomic age, by E. P. Wigner.—4. The new power, by G. Young.—5. The new weapon: The turn of the screw, by J. R. Oppenheimer.—6. Air force in the atomic age, by H. H. Arnold.—7. There is no defense, by L. N. Ridenour.—8. The new technique of private war, by E. U. Condon.—9. How close is the danger, by F. Seitz and H. Bethe.—10. An atomic arms race and its alternatives, by I. Langmuir.—11. How does it all add up, by H. Urey.—12. Can we avert an arms race by an inspection system?, by L. Szilard.—13. International control of atomic energy, by W. Lippmann.—14. The way out, by A. Einstein.—15. Survival is at stake, by Federation of American (Atomic) Scientists.

The mind of science. American affairs (New York) Jan. 1946, v. 8: 29-34. HC101.N317 v.8

Extracts from the testimony of scientists before committees of Congress. "They represent the scientific mind working at the level of ordinary understanding."

Mowrer, Edgar A. Understanding the atomic bomb. Article introduced into the Record by Mr. Judd, Oct. 29, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4909. J11.R5 v.91

Advocates joint Congressional committee to take testimony and resolve conflicting viewpoints on how serious a threat the atomic bomb really is.

Myer, Walter E. Political education for the atomic age. The Social studies (Philadelphia, Pa.) Feb. 1946, v. 37: 56-60.

The new age of atomics. London, The Social science association, Oct. 1945. 16 p. (No. 1)

Brief articles on some of the achievements of science written with the aim of explaining the part science can play in the social life of the community.

O'Connor, Tom. Atoms and you. New York, Pamphlet press, 1945. 21 p.

Ogburn, William F. Sociology and the atom; problem of changed methods of sociology to meet the future. American journal of sociology (Chicago) Jan. 1946, v. 51: 267-275. HM1.A7 v.51

"The use of atomic energy in machines will usher in the atomic age and more; the scientific revolution and its industrial uses may have even more extensive effects upon society than the industrial revolution ushered in by steam."

Oliphant, M. L. E. How the atom can be harnessed for peace: power production of nuclear methods; with diagrammatic drawings by G. H. Davis. Illustrated London news (London) Oct. 13, 1945, v. 207: 399-401. AP4.I3 v.207

Oppenheimer, J. Robert. Atomic weapons and the crisis in science. Saturday review of literature (N. Y.) v. 28, Nov. 24, 1945: 9-11. Z1219.S25 v.28

The former Director of the Los Alamos laboratory where the atomic bomb was constructed believes that man's fear of this terrible weapon may drive him into peace.

The Philadelphia resolution. Science (N. Y.) Dec. 14, 1945, v. 102: 608. Q1.S35 v.102

Text of a resolution (1) calling for a world authority to control the atomic bomb and (2) protesting the restrictive character of the May-Johnson bill for the domestic control of atomic energy. More than 1,200 scientists in the Philadelphia area endorsed the resolution.

Potter, Robert C. A B C of atomic energy. New York, Robert M. McBride and co., 1946.

Announced for May publication.

——— Atom comes of age. New York, Robert M. McBride and co., 1946.

Announced for May publication.

Present, Richard D. Scientists have no illusions. Free world (N. Y.) Dec. 1945, v. 10: 42-44. D410.F78 v.10

"The scientists are in agreement that the United States will forfeit its moral leadership if it does not take immediate steps to place atomic energy developments under international inspection and control."

The problem of atomic energy. The Antioch review. (Yellow Springs, Ohio) Winter, 1945-46. v. 5: 459-523. AP2. A562 v.5

Contents: Editorial.—With all our learning, by M. C. Otto.—Military consequences of atomic energy, by Joseph Rosenfarb.—Democracy and science fused by the atomic bomb, by John F. Sembower.—Atomic energy in practice, by G. Owen.—Social control of atomic energy, by O. S. Loud.

Pusey, Merlo. Secrecy on weapons. Editorial from the Washington Post. Introduced into the Record by Mr. Downey, Oct. 29, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4886-A4887.

J11.R5 v.91

"The key to future world security must necessarily be * * * the lifting of all secrecy as to weapons among the armed powers."

Rabi, I. I. The physicist returns from the war. Atlantic monthly (Boston) Oct. 1945, v. 176: 107-114.

AP2.A8 v.176

The author, a Nobel prize man, points out that radar and the atomic bomb resulted from a planned program of research which made use of known facts and principles. Now, Dr. Rabi says, the scientists want to return to their explorations of the unknown, to begin again where they left off five years ago.

Randolph, Jennings. Letter to President Truman dated Sept. 5, 1945, suggesting idea that taxes on industries flowing from atomic energy should be applied to the national debt, Sept. 5, 1945, Congressional record, 79th Cong., 1st sess., v. 91: A4037-A4038

J11.R5 v.91

Ridenour, Louis N. Atoms won't wait. The Nation (N. Y.) Mar. 2, 1946, v. 162: 256-257.

——— Military security and the atomic bomb. If we hide the facts of nature, we can undermine the security of achievement. Fortune (Chicago) Nov. 1945, v. 32: 170-171.

HF5001.F7 v.32

"The way to be prepared for enemies in a possible future war is to be ahead of them in every department; and the way to be ahead of them is to have more, cleverer, and better-informed men working harder, on the basis of more thoroughly diffused scientific information."

Rowan-Robinson, H. Atomic bomb. Nineteenth century (London) Sept. 1945, v. 138: 112-118.

AP4.N7 v.138

Outlawing the bomb is not enough, this writer urges. In peace man must find a new morality and channel his aggressive instincts into useful paths.

Salter, Sir Arthur. The United Nations and the atomic bomb. International conciliation (New York) Jan. 1946, no. 417: 40-48.

JX1907.A8 no.417

Speech delivered at Oxford, England, Oct. 8, 1945.

Sarnoff, David. Science for life or death. Mankind must make a fateful decision as atomic, other new weapons appear. New York Times, Aug. 10, 1945: 6.

Serials div.

To be published in book form by Cima publishing co., New York.

Schlegel, Richard. Scientists of the world, unite. Nation (N. Y.) Nov. 17, 1945, v. 161: 515-516.

AP2.N2 v.161

Recommends that an international body of scientists be formed to act as advisers to an international atomic energy control body.

Schlesinger, H. I. No precipitate action on the atomic bomb. Address before the American chemical society on Oct. 19, 1945. Introduced into the Record by Mr. Rowan, Oct. 31, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4966-A4967. J11.R5 v.91

Disapproval of the May-Johnson bill voiced by a chemist.

——— A scientist's views on the atomic bomb. A letter introduced into the Record by Mr. Rowan, Oct. 25, 1945. Congressional record, 79th Cong., 1st sess., v. 91: A4857-A4858. J11.R5 v.91

Calls May-Johnson bill ill advised. Asks careful consideration for measures to control atomic energy. Research must be unhampered.

Shotwell, James T. Control of atomic energy. Survey graphic (N. Y.) Oct. 1945, v. 34: 407, 408. HV1.S82 v.34

The seventh of a series of articles on world organization by a distinguished historian. Here he considers the adjustment of the United Nations Charter to the atomic era.

——— Our "endless frontier." Survey graphic (N. Y.) Nov. 1945, v. 34: 429-431. HV1.S82 v.34

In this eighth article Professor Shotwell tries to answer the question "what can thinking people do to harness this mighty new power for the good instead of the destruction of mankind."

Should we share the secret of the atomic bomb with any other nation? Bulletin of America's town meeting (N. Y.) Oct. 25, 1945, v. 11: 3-21. H69.T6 v.11

Broadcast of a Town meeting originating in St. Paul, Minnesota October 25, 1945. Speakers were Senator Joseph H. Ball; Dr. Reuben G. Gustavson; Dr. C. G. Suits and Senator Alexander Wiley.

Smith, E. S. C. and others. Applied atomic power. New York, Prentice-Hall co., 1946.

Announced for April publication.

Sokolsky, G. E. Atom research bill totalitarian. Article introduced into Record by Mr. Wherry, Oct. 29, 1945. Congressional record, 79th Cong., 1st sess., v. 91: 10273-10274. J11.R5 v.91

May-Johnson bill called totalitarian.

Special committee on development, use, and control of atomic energy. Oct. 18, 1945. Congressional record, 79th Cong., 1st sess., v. 91: 9942-9946. J11.R5 v.91

Debate on the proposal to create a special Senate committee to study atomic energy and its control.

Stassen, Harold E. Atomic control. Academy of political science, New York. Proceedings, Jan. 1946, v. 21: 563-572. H31.A4 v.21

Urges amendment of UNO charter to prohibit manufacture of atomic bombs. Advocates also setting up an international Atomic Commission with rights of inspection.

Stern, Bernhard. The challenge of advancing technology. American academy of political and social science (Philadelphia). Annals, Nov. 1945, v. 242: 46-52. H1.A4 v.242

"The spectacular discovery of a method of unharnessing atomic energy for the uses of man has catapulted the world into an uncharted tomorrow. It has dwarfed the technological changes prior to it, which, however important, were for the most part mere modifications of previously known forms of power and processes and types of materials . . . The conquest of the atom may well be but an initial step in a chain of events which will lead to a comparable conquest of man's social irrationalities which affect urban development as they do all other aspects of man's social life."

Stone Robert S. Fifty years of radiology. From Roentgen to the era of atomic power. Chemistry (Washington, D. C.) Dec. 1945, 19: 17-30; Jan. 1946: 12-22. Serials div.

An address delivered at a joint session of the American college of radiology, Chicago medical society, Chicago Roentgen society. Chicago institute of medicine and the Physics club of Chicago.

Swing, Raymond. In the name of sanity. New York Harper & bros. 1946. 116 p.

A compilation of the famous Friday night broadcasts on the atomic bomb.

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——— A bill to conserve and restrict the use of atomic energy for the national defense, to prohibit its private exploitation, and to preserve the secret and confidential character of information concerning the use and application of atomic energy. Introduced into the House by Mr. Voorhis, Sept. 12, 1945 and referred to the Committee on military affairs. 5 p. (79th Cong., 1st sess. H. R. 4014) GPRR

——— A bill for the creation of an agency of the United States Government to be known as the Atomic power authority, to define its powers and functions, and for other purposes. Introduced into the House by Mr. Voorhis, Sept. 12, 1945 and referred to the Committee on military affairs. 5 p. (79th Cong., 1st sess. H. R. 4015) GPRR

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—— ——— A bill for the development and control of atomic energy. Introduced into the House by Mr. May, October 3, 1945 and referred to the Committee on military affairs. 29 p. (79th Cong., 1st sess. H. R. 4280) GPRR

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—— ——— Joint resolution to provide for the formulation of policies with respect to the control and use of atomic energy. Introduced into the Senate by Mr. Elbert D. Thomas, Sept. 12, 1945 and referred to the Committee on military affairs. Reported Sept. 25, 1945 with amendments. 3 p. (79th Cong., 1st sess. S. J. Res. 93) GPRR

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—— ——— A bill for the development and control of atomic energy. Introduced into the Senate by Mr. Johnson, October 3, 1945 and referred to the Committee on military affairs. 29 p. (79th Cong., 1st sess. S. 1463) GPRR

—— ——— Resolution [creating the Special Senate Committee on atomic energy]. Introduced into the Senate by Mr. McMahon, October 9, 1945 and referred to the Committee on interstate commerce. 2 p. (79th Cong., 1st sess. S. Res. 179) GPRR

Reported by Mr. McMahon October 15, 1945, with amendments and referred to the Committee to audit and control the contingent expenses of the Senate. Reported by Mr. Lucas October 18, 1945, without additional amendment. Considered, amended and agreed to, October 22, 1945.

—— ——— A bill for the development and control of atomic energy. Introduced into the Senate by Mr. Ball, Nov. 6, 1945 and referred to the Special Committee on atomic energy. 10 p. (79th Cong., 1st sess. S. 1557.) GPRR

—— ——— Resolution [expressing the sense of the Senate (1) that the President enter into negotiations with other nations with a view to reaching an agreement which will prohibit the use of the atomic bomb as a weapon or instrument of war, and (2) that this country encourage the United Nations organization to use its powers effectively to prevent the use of the atomic bomb as a weapon or instrument of war]. Introduced into the Senate by Mr. McKellar, Nov. 8, 1945 and referred to the Special Committee on atomic energy. 2 p. (79th Cong., 1st sess. S. Res. 186.)

—— ——— Resolution [calling upon the President to negotiate an international agreement with other member nations of the United Nations on the control of atomic energy]. Introduced into the Senate on Dec. 17, 1945 and referred to the Special Committee on atomic energy. (79th Cong., 1st sess. S. Res. 206.)

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Part 3, Dec. 13, 14, 19, and 20, 1945. Statements of Dr. R. Gunn, Commodore W. S. Parsons, Vice Adm. W. H. P. Blandy, Rear Adm. W. R. Purnell, Rear Adm. L. L. Strauss, F. R. Creedon, H. E. Thompson, H. A. Winne, and E. H. Brown.

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Calendar No. 1251

79TH CONGRESS
2D SESSION

S. 1717

[Report No. 1211]

IN THE SENATE OF THE UNITED STATES

DECEMBER 20 (legislative day, DECEMBER 19), 1945

Mr. McMAHON introduced the following bill; which was read twice and referred to the Special Committee on Atomic Energy

APRIL 19 (legislative day, MARCH 5), 1946

Reported by Mr. McMAHON, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

A BILL

For the development and control of atomic energy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **DECLARATION OF POLICY**

4 **SECTION 1. (a) FINDINGS AND DECLARATION.**—Re-
5 search and experimentation in the field of nuclear fission have
6 attained the stage at which the release of atomic energy on
7 a large scale is practical. The significance of the atomic
8 bomb for military purposes is evident. The effect of the
9 use of atomic energy for civilian purposes upon the social,
10 economic, and political structures of today cannot now

1 be determined. It is reasonable to anticipate, however,
2 that tapping this new source of energy will cause profound
3 changes in our present way of life. Accordingly, it is
4 hereby declared to be the policy of the people of the United
5 States that the development and utilization of atomic energy
6 shall be directed toward improving the public welfare, in-
7 creasing the standard of living, strengthening free com-
8 petition among private enterprises so far as practicable, and
9 cementing world peace.

10 (b) PURPOSE OF ACT.—It is the purpose of this Act
11 to effectuate these policies by providing, among others, for
12 the following major programs;

13 (1) A program of assisting and fostering private re-
14 search and development on a truly independent basis to
15 encourage maximum scientific progress;

16 (2) A program for the free dissemination of basic scien-
17 tific information and for maximum liberality in dissemination
18 of related technical information;

19 (3) A program of federally conducted research to
20 assure the Government of adequate scientific and technical
21 accomplishment;

22 (4) A program for Government control of the produc-
23 tion, ownership, and use of fissionable materials to protect
24 the national security and to insure the broadest possible
25 exploitation of the field;

1 (5) A program for simultaneous study of the social,
2 political, and economic effects of the utilization of atomic
3 energy; and

4 (6) A program of administration which will be con-
5 sistent with international agreements made by the United
6 States, and which will enable the Congress to be currently
7 informed so as to take further legislative action as may
8 hereafter be appropriate.

9 ATOMIC ENERGY COMMISSION

10 SEC. 2. (a) There is hereby established an Atomic
11 Energy Commission (herein called the Commission), which
12 shall be composed of five members. Three members shall
13 constitute a quorum of the Commission. The President shall
14 designate one member as Chairman of the Commission.

15 (b) Members of the Commission shall be appointed by
16 the President, by and with the advice and consent of the
17 Senate, and shall serve at the pleasure of the President. In
18 submitting nominations to the Senate, the President shall set
19 forth the experience and qualifications of each person so
20 nominated. Each member, except the Chairman, shall re-
21 ceive compensation at the rate of \$15,000 per annum; the
22 Chairman shall receive compensation at the rate of \$20,000
23 per annum. No member of the Commission shall engage in
24 any other business, vocation, or employment than that of
25 serving as a member of the Commission.

1 (c) The principal office of the Commission shall be in
2 the District of Columbia, but the Commission may exercise
3 any or all of its powers in any place. The Commission shall
4 hold such meetings, conduct such hearings, and receive
5 such reports as will enable it to meet its responsibilities for
6 carrying out the purposes of this Act.

7 RESEARCH

8 SEC. 3. (a) RESEARCH ASSISTANCE.—The Commis-
9 sion is directed to exercise its powers in such manner as
10 to insure the continued conduct of research and develop-
11 mental activities in the fields specified below by private
12 or public institutions or persons and to assist in the ac-
13 quisition of an ever-expanding fund of theoretical and prac-
14 tical knowledge in such fields. To this end the Commis-
15 sion is authorized and directed to make contracts, agree-
16 ments, arrangements, grants-in-aid, and loans—

17 (1) for the conduct of research and developmental
18 activities relating to (a) nuclear processes; (b) the
19 theory and production of atomic energy, including
20 processes and devices related to such production; (c)
21 utilization of fissionable and radioactive materials for
22 medical or health purposes; (d) utilization of fission-
23 able and radioactive materials for all other purposes,
24 including industrial uses; and (e) the protection of
25 health during research and production activities; and

~~(2)~~ for studies of the social, political, and economic effects of the availability and utilization of atomic energy.

The Commission may make partial advance payments on such contracts and arrangements. Such contracts or other arrangements may contain provisions to protect health, to minimize danger from explosion, and for reporting and inspection of work performed thereunder as the Commission may determine, but shall not contain any provisions or conditions which prevent the dissemination of scientific or technical information, except to the extent already required by the Espionage Act.

~~(b)~~ FEDERAL ATOMIC RESEARCH.—The Commission is authorized and directed to conduct research and developmental activities through its own facilities in the fields specified in ~~(a)~~ above.

PRODUCTION OF FISSIONABLE MATERIALS

SEC. 4. ~~(a)~~ DEFINITION.—The term “production of fissionable materials” shall include all methods of manufacturing, producing, refining, or processing fissionable materials, including the process of separating fissionable material from other substances in which such material may be contained, whether by thermal diffusion, electromagnetic separation, or other processes.

~~(b)~~ AUTHORITY TO PRODUCE.—The Commission shall

1 be the exclusive producer of fissionable materials, except pro-
2 duction incident to research or developmental activities sub-
3 ject to the restrictions provided in subparagraph (d) below.
4 The quantities of fissionable material to be produced in any
5 quarter shall be determined by the President.

6 ~~(e)~~ PROHIBITION.—It shall be unlawful for any person
7 to produce any fissionable material except as may be incident
8 to the conduct of research or developmental activities.

9 ~~(d)~~ RESEARCH AND DEVELOPMENT ON PRODUCTION
10 PROCESSES.—(1) The Commission shall establish by regula-
11 tion such requirements for the reporting of research and de-
12 velopmental activities on the production of fissionable mate-
13 rials as will assure the Commission of full knowledge of all
14 such activities, rates of production, and quantities produced.

15 ~~(2)~~ The Commission shall provide for the frequent
16 inspection of all such activities by employees of the Com-
17 mission.

18 ~~(3)~~ No person may in the course of such research or
19 developmental activities possess or operate facilities for the
20 production of fissionable materials in quantities or at a rate
21 sufficient to construct a bomb or other military weapon
22 unless all such facilities are the property of and subject to
23 the control of the Commission. The Commission is author-
24 ized, to the extent that it deems such action consistent with
25 the purposes of this Act, to enter into contracts for the

1 conduct of such research or developmental activities involv-
2 ing the use of the Commission's facilities.

3 ~~(c)~~ EXISTING CONTRACTS.—The Commission is au-
4 thorized to continue in effect and modify such contracts
5 for the production of fissionable materials as may have been
6 made prior to the effective date of this Act, except that, as
7 rapidly as practicable, and in any event not more than one
8 year after the effective date of this Act, the Commission
9 shall arrange for the exclusive operation of facilities employed
10 in the manufacture of fissionable materials by employees
11 of the Commission.

12 CONTROL OF MATERIALS

13 SEC. 5. ~~(a)~~ FISSIONABLE MATERIALS.—

14 ~~(1)~~ DEFINITION.—The term “fissionable materials”
15 shall include plutonium, uranium 235, and such other ma-
16 terials as the Commission may from time to time determine
17 to be capable of releasing substantial quantities of energy
18 through nuclear fission of the material.

19 ~~(2)~~ PRIVATELY OWNED FISSIONABLE MATERIALS.—
20 Any person owning any right, title, or interest in or to any
21 fissionable material shall forthwith transfer all such right,
22 title, or interest to the Commission.

23 ~~(3)~~ PROHIBITION.—It shall be unlawful for any per-
24 son to ~~(a)~~ own any fissionable material; or ~~(b)~~ after sixty
25 days after the effective date of this Act and except as

1 authorized by the Commission possess any fissionable ma-
2 terial; or (c) export from or import into the United States
3 any fissionable material, or directly or indirectly be a party
4 to or in any way a beneficiary of, any contract, arrange-
5 ment, or other activity pertaining to the production, refin-
6 ing, or processing of any fissionable material outside of the
7 United States.

8 (4) DISTRIBUTION OF FISSIONABLE MATERIALS.—

9 The Commission is authorized and directed to distribute
10 fissionable materials to all applicants requesting such ma-
11 terials for the conduct of research or developmental activities
12 either independently or under contract or other arrangement
13 with the Commission. If sufficient materials are not avail-
14 able to meet all such requests, and applications for licenses
15 under section 7, the Commission shall allocate fissionable
16 materials among all such applicants in the manner best
17 calculated to encourage independent research and develop-
18 ment by making adequate fissionable materials available for
19 such purposes. The Commission shall refuse to distribute
20 or allocate any materials to any applicant, or shall recall
21 any materials after distribution or allocation from any appli-
22 cant, who is not equipped or who fails to observe such safety
23 standards to protect health and to minimize danger from
24 explosion as may be established by the Commission.

25 (b) SOURCE MATERIALS.—

1 ~~(1)~~ DEFINITION.—The term “source materials” shall
2 include any ore containing uranium, thorium, or beryllium,
3 and such other materials peculiarly essential to the produc-
4 tion of fissionable materials as may be determined by the
5 Commission with the approval of the President.

6 ~~(2)~~ LICENSE FOR TRANSFERS REQUIRED.—No per-
7 son may transfer possession or title to any source material
8 after mining, extraction, or removal from its place of origin;
9 and no person may receive any source material, without a
10 license from the Commission.

11 ~~(3)~~ ISSUANCE OF LICENSES.—Any person desiring
12 to transfer or receive possession of any source material shall
13 apply for a license therefor in accordance with such proce-
14 dures as the Commission may by regulation establish. The
15 Commission shall establish such standards for the issuance
16 or refusal of licenses as it may deem necessary to assure
17 adequate source materials for production, research, or de-
18 velopmental activities pursuant to this Act or to prevent the
19 use of such materials in a manner inconsistent with the na-
20 tional welfare.

21 ~~(4)~~ REPORTING.—The Commission is authorized to
22 issue such regulations or orders requiring reports of owner-
23 ship, possession, extraction, refining, shipment, or other
24 handling of source materials as it may deem necessary.

1 ~~(c)~~ BYPRODUCT MATERIALS.—

2 ~~(1)~~ DEFINITION.—The term “byproduct material”
3 shall be deemed to refer to all materials ~~(except fissionable~~
4 material) yielded in the processes of producing fissionable
5 material.

6 ~~(2)~~ DISTRIBUTION.—The Commission is authorized
7 and directed to distribute, with or without charge, byproduct
8 materials to all applicants seeking such materials for research
9 or developmental work, medical therapy, industrial uses, or
10 such other useful applications as may be developed. If suf-
11 ficient materials to meet all such requests are not available,
12 the Commission shall allocate such materials among appli-
13 cants therefor, giving preference to the use of such materials
14 in the conduct of research and developmental activity and
15 medical therapy. The Commission shall refuse to distribute
16 or allocate any byproduct materials to any applicant, or
17 recall any materials after distribution or allocation from any
18 applicant, who is not equipped or who fails to observe such
19 safety standards to protect health as may be established
20 by the Commission.

21 ~~(d)~~ GENERAL PROVISIONS: ~~(1)~~ The Commission is
22 authorized to—

23 ~~(i)~~—acquire or purchase fissionable or source
24 materials within the United States or elsewhere;

25 ~~(ii)~~—take, requisition, or condemn within the

1 United States any fissionable or source material and
2 make just compensation therefor. The Commission shall
3 determine such compensation. In the exercise of such
4 rights of eminent domain and condemnation, proceed-
5 ings may be instituted under the Act of August 1, 1888
6 (U. S. C. 1940, title 40, sec. 257), or any other appli-
7 cable Federal statute. Upon or after the filing of the
8 condemnation petition, immediate possession may be
9 taken and the property may be treated by the Commis-
10 sion in the same manner as other similar property owned
11 by it;

12 (iii) conduct exploratory operations, investigations,
13 inspections to determine the location, extent, mode of
14 occurrence, use, or condition of source materials with or
15 without the consent of the owner of any interest therein,
16 making just compensation for any damage or injury oc-
17 casioned thereby.

18 (2) The Commission shall establish by regulation a
19 procedure by which any person who is dissatisfied with its
20 action in allocating, refusing to allocate, or in rescinding any
21 allocation of fissionable, source, or byproduct materials to
22 him may obtain a review of such determination by a board
23 of appeal consisting of two or more members appointed by
24 the Commission and at least one member of the Commission.

1 ~~MILITARY APPLICATIONS OF ATOMIC POWER~~

2 ~~SEC. 6. (a)~~ The Commission is authorized and directed
3 to—

4 ~~(1)~~ conduct experiments and do research and de-
5 velopmental work in the military application of atomic
6 power; and

7 ~~(2)~~ have custody of all assembled or unassembled
8 atomic bombs, bomb parts, or other atomic military
9 weapons, presently or hereafter produced, except that
10 upon the express finding of the President that such
11 action is required in the interests of national defense,
12 the Commission shall deliver such quantities of weapons
13 to the armed forces as the President may specify.

14 ~~(b)~~ The Commission shall not conduct any research
15 or developmental work in the military application of atomic
16 power if such research or developmental work is contrary
17 to any international agreement of the United States.

18 ~~(c)~~ The Commission is authorized to engage in the
19 production of atomic bombs, bomb parts, or other applica-
20 tions of atomic power as military weapons, only to the
21 extent that the express consent and direction of the Presi-
22 dent of the United States has been obtained, which consent
23 and direction shall be obtained for each quarter.

24 ~~(d)~~ It shall be unlawful for any person to manufacture,
25 produce, or process any device or equipment designed to

1 utilize fissionable materials as a military weapon, except
2 as authorized by the Commission.

3 ATOMIC ENERGY DEVICES

4 SEC. 7. (a) LICENSE REQUIRED.—It shall be unlawful
5 for any person to operate any equipment or device utilizing
6 fissionable materials without a license issued by the Commis-
7 sion authorizing such operation.

8 (b) ISSUANCE OF LICENSES.—Any person desiring to
9 utilize fissionable materials in any such device or equipment
10 shall apply for a license therefor in accordance with such
11 procedures as the Commission may by regulation establish.
12 The Commission is authorized and directed to issue such a
13 license on a nonexclusive basis and to supply appropriate
14 quantities of fissionable materials to the extent available to
15 any applicant (1) who is equipped to observe such safety
16 standards to protect health and to minimize danger from
17 explosion as the Commission may establish; and (2) who
18 agrees to make available to the Commission such technical
19 information and data concerning the operation of such device
20 as the Commission may determine necessary to encourage
21 the use of such devices by as many licensees as possible.
22 Where any license might serve to maintain or foster the
23 growth of monopoly, restraint of trade, unlawful competition,
24 or other trade position inimical to the entry of new, freely
25 competitive enterprises, the Commission is authorized and

1 directed to refuse to issue such license or to establish such
2 conditions to prevent these results as the Commission, in
3 consultation with the Attorney General, may determine.
4 The Commission shall report promptly to the Attorney
5 General any information it may have of the use of such de-
6 vices which appears to have these results. No license may
7 be given to a foreign government or to any person who is
8 not under and within the jurisdiction of the United States.

9 (c) BYPRODUCT POWER.—If in the production of fis-
10 sionable materials the production processes yield energy
11 capable of utilization, such energy may be used by the Com-
12 mission, transferred to other Government agencies, sold to
13 public or private utilities under contract providing for reason-
14 able resale prices, or sold to private consumers at reasonable
15 rates and on as broad a basis of eligibility as the Commission
16 may determine to be possible.

17 (d) REPORTS TO CONGRESS.—Whenever in its opin-
18 ion industrial, commercial, or other uses of fissionable mate-
19 rials have been sufficiently developed to be of practical
20 value, the Commission shall prepare a report to the Con-
21 gress stating all the facts, the Commission's estimate of the
22 social, political, and economic effects of such utilization, and
23 the Commission's recommendations for necessary or desir-
24 able supplemental legislation. Until such a report has been
25 filed with the Commission and the period of ninety days has

1 elapsed after such filing, within which period the Commis-
2 sion may adopt supplemental legislation, no license for the
3 use of atomic energy devices shall be issued by the
4 Commission.

5 PROPERTY OF THE COMMISSION

6 SEC. 8. (a) The President shall direct the transfer
7 to the Commission of the following property owned by the
8 United States or any of its agencies, or any interest in such
9 property held in trust for or on behalf of the United States:

10 (1) All fissionable materials; all bombs and bomb parts;
11 all plants, facilities, equipment, and materials for the process-
12 ing or production of fissionable materials, bombs, and bomb
13 parts; all processes and technical information of any kind,
14 and the source thereof (including data, drawings, specifica-
15 tions, patents, patent applications, and other sources, relating
16 to the refining or production of fissionable materials; and all
17 contracts, agreements, leases, patents, applications for patents,
18 inventions and discoveries (whether patented or unpatented),
19 and other rights of any kind concerning any such items;

20 (2) All facilities and equipment, and materials therein
21 devoted primarily to atomic energy research and develop-
22 ment; and

23 (3) All property in the custody and control of the
24 Manhattan engineer district.

25 (b) In order to render financial assistance to those

1 States and local governments in which the activities of the
2 Commission are carried on and in which the Commission,
3 or its agents, have acquired properties previously subject
4 to State and local taxation, the Commission is authorized
5 to make payments to State and local governments in
6 lieu of such taxes. Such payments may be in the amounts,
7 at the times, and upon the terms the Commission deems
8 appropriate, but the Commission shall be guided by the
9 policy of not exceeding the taxes which would have been
10 payable for such property in the condition in which it was
11 acquired, except where special burdens have been cast upon
12 the State or local government by activities of the Com-
13 mission, the Manhattan engineer district, or their agents,
14 and in such cases any benefits accruing to the States and
15 local governments by reason of these activities shall be con-
16 sidered in the determination of such payments. The Com-
17 mission and any corporation created by it, and the property
18 and income of the Commission or of such corporation, are
19 hereby expressly exempted from taxation in any manner
20 or form by any State, county, municipality, or any sub-
21 division thereof.

22 DISSEMINATION OF INFORMATION

23 SEC. 9. (a) BASIC SCIENTIFIC INFORMATION.—Basic
24 scientific information in the fields specified in section 3 may
25 be freely disseminated. The term “basic scientific informa-

tion" shall include, in addition to theoretical knowledge of nuclear and other physics, chemistry, biology, and therapy, all results capable of accomplishment, as distinguished from the processes or techniques of accomplishing them.

(b) RELATED TECHNICAL INFORMATION.—The Commission shall establish a Board of Atomic Information consisting of one or more employees and at least one member of the Commission. The Board shall, under the direction and supervision of the Commission, provide for the dissemination of related technical information with the utmost liberality as freely as may be consistent with the foreign and domestic policies established by the President and shall have authority to—

(1) establish such information services, publications, libraries, and other registers of available information as may be helpful in effectuating this policy;

(2) designate by regulation the types of related technical information the dissemination of which will effectuate the foregoing policy. Such designations shall constitute an administrative determination that such information is not of value to the national defense and that any person is entitled to receive such information, within the meaning of the Espionage Act. Failure to make any such designation shall not, however, be deemed a

determination that such undesignated information is subject to the provisions of said Act;

(3) by regulation or order, require reports of the conduct of independent research or development activities in the fields specified in section 3 and of the operation of atomic energy devices under licenses issued pursuant to section 7;

(4) provide for such inspections of independent research and development activities of the types specified in section 3 and of the operation of atomic energy devices as the Commission or the Board may determine; and

(5) whenever it will facilitate the carrying out of the purposes of the Act, adopt by regulation administrative interpretations of the Espionage Act except that any such interpretation shall, before adoption, receive the express approval of the President.

PATENTS

SEC. 10. (a) Whenever any person invents a device or method for the production, refining, or other processing of fissionable material: (i) he may file a patent application to cover such invention, sending a copy thereof to the Commission; (ii) if the Commissioner of Patents determines that the invention is patentable, he shall issue a patent in the name of the Commission; and (iii) the Commission shall make just

1 compensation to such person. The Commission shall appoint
2 a Patent Royalty Board consisting of one or more employees
3 and at least one member of the Commission, and the Commis-
4 sioner of Patents. The Patent Royalty Board shall deter-
5 mine what constitutes just compensation in each such case
6 and whether such compensation is to be paid in periodic pay-
7 ments rather than in a lump sum. Any person to whom any
8 such patent has heretofore been issued shall forthwith transfer
9 all right, title, and interest in and to such patent to the Com-
10 mission and shall receive therefor just compensation as pro-
11 vided above.

12 ~~(b)~~ (1) Any patent now or hereafter issued covering
13 any process or device utilizing or peculiarly necessary to the
14 utilization of fissionable materials, or peculiarly necessary to
15 the conduct of research or developmental activities in the
16 fields specified in section 3, is hereby declared to be affected
17 with the public interest and its general availability for such
18 uses is declared to be necessary to effectuate the purposes of
19 this Act.

20 ~~(2)~~ Any person to whom any such patent has been
21 issued, or any person desiring to use any device or process
22 covered by such patent for such uses, may apply to the
23 Patent Royalty Board, for determination by such Board of
24 a reasonable royalty fee for such use of the patented process

1 or device intended to be used under the Commission's
2 license.

3 (3) In determining such reasonable royalty fee, the
4 Patent Royalty Board shall take into consideration any
5 defense, general or special, that might be pleaded by a
6 defendant in an action for infringement, the extent to which,
7 if any, such patent was developed through federally fi-
8 nanced research, the degree of utility, novelty, and im-
9 portance of the patent, the cost to the patentee of developing
10 such process or device, and a reasonable rate of return on
11 such research investment by the patentee.

12 (4) No court, Federal, State, or Territorial, shall have
13 jurisdiction or power to stay, restrain, or otherwise enjoin
14 any such use of any such patented device or process by
15 any person on the ground of infringement of such patent.
16 In any action for infringement of any such patent filed in
17 any such court, the court shall have authority only to order
18 the payment of reasonable royalty fees and attorney's fees
19 and court costs as damages for any such infringement. If
20 the Patent Royalty Board has not previously determined
21 the reasonable royalty fee for the use of the patented device
22 or process involved in any case, the court in such case shall,
23 before entering judgment, obtain from the Patent Royalty
24 Board a report containing its recommendation as to the
25 reasonable royalty fee it would have established had ap-

1 plication been made to it as provided in subparagraphs 2
2 and 3 above.

3 ORGANIZATION AND GENERAL AUTHORITY.

4 SEC. 11. (a) ORGANIZATION.—There are hereby es-
5 tablished within the Commission a Division of Research, a
6 Division of Production, a Division of Materials, and a Divi-
7 sion of Military Application. Each division shall be under
8 the direction of a Director who shall be appointed by the
9 President, by and with the advice and consent of the Senate,
10 and shall receive compensation at the rate of \$15,000 per
11 annum. The Commission shall delegate to each such
12 division such of its powers under this Act as in its opinion
13 from time to time will promote the effectuation of the
14 purposes of this Act in an efficient manner. Nothing in
15 this paragraph shall prevent the Commission from estab-
16 lishing such additional divisions or other subordinate or-
17 ganizations as it may deem desirable.

18 (b) GENERAL AUTHORITY.—In the performance of
19 its functions the Commission is authorized to—

20 (1) establish advisory boards to advise with and
21 make recommendations to the Commission on legisla-
22 tion, policies, administration, and research;

23 (2) establish by regulation or order such stand-
24 ards and instructions to govern the possession and use
25 of fissionable and byproduct materials as the Commis-

1 sion may deem necessary or desirable to protect health
2 or to minimize danger from explosion;

3 ~~(3)~~ make such studies and investigations, obtain
4 such information, and hold such hearings as the Commis-
5 sion may deem necessary or proper to assist it in exercis-
6 ing any authority provided in this Act, or in the adminis-
7 tration or enforcement of this Act, or any regulations or
8 orders issued thereunder. For such purposes the Com-
9 mission is authorized to require any person to permit the
10 inspection and copying of any records or other documents,
11 to administer oaths and affirmations, and by subpoena to
12 require any person to appear and testify, or to appear
13 and produce documents, or both, at any designated place.
14 Witnesses subpoenaed under this subsection shall be paid
15 the same fees and mileage as are paid witnesses in the
16 district courts of the United States;

17 ~~(4)~~ create or organize corporations, the stock of
18 which shall be wholly owned by the United States and
19 controlled by the Commission, to carry out the provisions
20 of this Act;

21 ~~(5)~~ appoint and fix the compensation of such officers
22 and employees as may be necessary to carry out the
23 functions of the Commission. All such officers and em-
24 ployees shall be appointed in accordance with the civil-
25 service laws and their compensation fixed in accordance

1 with the Classification Act of 1923, as amended, except
2 that expert administrative, technical, and professional
3 personnel may be employed and their compensation fixed
4 without regard to such laws. The Commission shall
5 make adequate provision for administrative review by a
6 board consisting of one or more employees and at least
7 one member of the Commission of any determination to
8 dismiss any scientific or professional employee; and

9 (6) acquire such materials, property, equipment,
10 and facilities, establish or construct such buildings and
11 facilities, modify such building and facilities from time to
12 time, and construct, acquire, provide, or arrange for such
13 facilities and services for the housing, health, safety, wel-
14 fare, and recreation of personnel employed by the Com-
15 mission as it may deem necessary.

16 ENFORCEMENT

17 SEC. 12. (a) Any person who willfully violates, at-
18 tempts to violate, or conspires to violate, any of the provisions
19 of this Act or any regulations or orders issued thereunder
20 shall, upon conviction thereof, be punishable by a fine of not
21 more than \$10,000, or by imprisonment for a term of not
22 exceeding five years, or both.

23 (b) Whenever in the judgment of the Commission any
24 person has engaged or is about to engage in any acts or prac-
25 tices which constitute or will constitute a violation of any pro-

1 vision of this Act, it may make application to the appropriate
2 court for an order enjoining such acts or practices, or for an
3 order enforcing compliance with such provision, and upon a
4 showing by the Commission that such person has engaged
5 or is about to engage in any such acts or practices a perma-
6 nent or temporary injunction, restraining order, or other
7 order shall be granted without bond.

8 (e) In case of contumacy by, or refusal to obey a
9 subpoena served upon, any person pursuant to section 11
10 (b) (3), the district court for any district in which such
11 person is found or resides or transacts business, upon ap-
12 plication by the Commission, shall have jurisdiction to issue
13 an order requiring such person to appear and give testimony
14 or to appear and produce documents, or both; and any failure
15 to obey such order of the court may be punished by such court
16 as a contempt thereof.

17 REPORTS

18 SEC. 13. The Commission shall, on the first days of
19 January, April, July, and October, submit reports to the
20 President, to the Senate and to the House of Representa-
21 tives. Such reports shall summarize and appraise the ac-
22 tivities of the Commission and of each division and board
23 thereof, and specifically shall contain financial statements;
24 lists of licenses issued, of property acquired, of research

1 contracts and arrangements entered into, and of the amounts
2 of fissionable material and the persons to whom allocated;
3 the Commission's program for the following quarter includ-
4 ing lists of research contracts and arrangement proposed
5 to be entered into; conclusions drawn from studies of the
6 social, political, and economic effects of the release of atomic
7 energy; and such recommendations for additional legislation
8 as the Commission may deem necessary or desirable.

9 DEFINITIONS

10 SEC. 14. As used in this Act—

11 (a) The term "atomic energy" shall include all forms
12 of energy liberated in the artificial transmutation of atomic
13 species.

14 (b) The term "Government agency" means any execu-
15 tive department, board, bureau, commission, or other agency
16 in the executive branch of the Federal Government, or any
17 corporation wholly owned (either directly or through one or
18 more corporations) by the United States.

19 (c) The term "person" means any individual, corpora-
20 tion, partnership, firm, association, trust, estate, public or
21 private institution, group, any government other than the
22 United States, any political subdivision of any such govern-
23 ment, and any legal successor, representative, agent, or
24 agency of the foregoing, or other entity.

1 (d) The term "United States" includes all Territories
2 and possessions of the United States.

3 APPROPRIATIONS

4 SEC. 15. There are hereby authorized to be appropriated
5 such sums as may be necessary and appropriate to carry out
6 the provisions and purposes of this Act. Funds appropriated
7 to the Commission shall, if obligated during the fiscal year
8 for which appropriated, remain available for expenditure
9 for four years following the expiration of the fiscal year for
10 which appropriated. After such four-year period, the un-
11 expended balances of appropriations shall be carried to the
12 surplus fund and covered into the Treasury.

13 SEPARABILITY OF PROVISIONS

14 SEC. 16. If any provision of this Act, or the applica-
15 tion of such provision to any person or circumstances, is
16 held invalid, the remainder of this Act or the application
17 of such provision to persons or circumstances other than
18 those to which it is held invalid, shall not be affected thereby.

19 SHORT TITLE

20 SEC. 17. This Act may be cited as the "Atomic Energy
21 Act of 1946."

22 DECLARATION OF POLICY

23 SECTION 1. (a) FINDINGS AND DECLARATION.—Re-
24 search and experimentation in the field of nuclear chain
25 reaction have attained the stage at which the release of atomic

1 energy on a large scale is practical. The significance of the
2 atomic bomb for military purposes is evident. The effect of
3 the use of atomic energy for civilian purposes upon the social,
4 economic, and political structures of today cannot now be
5 determined. It is a field in which unknown factors are in-
6 volved. Therefore, any legislation will necessarily be subject
7 to revision from time to time. It is reasonable to anticipate,
8 however, that tapping this new source of energy will cause
9 profound changes in our present way of life. Accordingly,
10 it is hereby declared to be the policy of the people of the United
11 States that, subject at all times to the paramount objective of
12 assuring the common defense and security, the development
13 and utilization of atomic energy shall, so far as practicable,
14 be directed toward improving the public welfare, increasing
15 the standard of living, strengthening free competition in pri-
16 vate enterprise, and promoting world peace.

17 (b) PURPOSE OF ACT.—It is the purpose of this Act
18 to effectuate the policies set out in section 1 (a) by providing,
19 among others, for the following major programs relating to
20 atomic energy:

21 (1) A program of assisting and fostering private re-
22 search and development to encourage maximum scientific
23 progress;

24 (2) A program for the control of scientific and technical
25 information which will permit the dissemination of such

1 information to encourage scientific progress, and for the shar-
 2 ing on a reciprocal basis of information concerning the
 3 practical industrial application of atomic energy as soon as
 4 effective and enforceable safeguards against its use for
 5 destructive purposes can be devised;

6 (3) A program of federally conducted research and
 7 development to assure the Government of adequate scientific
 8 and technical accomplishment;

9 (4) A program for Government control of the produc-
 10 tion, ownership, and use of fissionable material to assure
 11 the common defense and security and to insure the broadest
 12 possible exploitation of the field; and

13 (5) A program of administration which will be con-
 14 sistent with the foregoing policies and with international
 15 arrangements made by the United States, and which will
 16 enable the Congress to be currently informed so as to take
 17 further legislative action as may hereafter be appropriate.

18 ORGANIZATION

19 SEC. 2. (a) ATOMIC ENERGY COMMISSION.—

20 (1) There is hereby established an Atomic Energy
 21 Commission (herein called the Commission), which shall be
 22 composed of five members. Three members shall constitute
 23 a quorum of the Commission. The President shall desig-
 24 nate one member as Chairman of the Commission.

25 (2) Members of the Commission shall be appointed by

1 the President, by and with the advice and consent of the
2 Senate. In submitting any nomination to the Senate, the
3 President shall set forth the experience and the qualifications
4 of the nominee. The term of office of each member of the
5 Commission taking office prior to the expiration of two years
6 after the date of enactment of this Act shall expire upon the
7 expiration of such two years. The term of office of each
8 member of the Commission taking office after the expiration
9 of two years from the date of enactment of this Act shall be
10 five years, except that (A) the terms of office of the mem-
11 bers first taking office after the expiration of two years from
12 the date of enactment of this Act shall expire, as designated
13 by the President at the time of appointment, one at the end
14 of three years, one at the end of four years, one at the end
15 of five years, one at the end of six years, and one at the
16 end of seven years, after the date of enactment of this Act;
17 and (B) any member appointed to fill a vacancy occurring
18 prior to the expiration of the term for which his predecessor
19 was appointed, shall be appointed for the remainder of such
20 term. Any member of the Commission may be removed by
21 the President for inefficiency, neglect of duty, or malfeasance
22 in office. Each member, except the Chairman, shall receive
23 compensation at the rate of \$15,000 per annum; and the
24 Chairman shall receive compensation at the rate of \$17,500
25 per annum. No member of the Commission shall engage in

1 any other business, vocation, or employment than that of
2 serving as a member of the Commission.

3 (3) The principal office of the Commission shall be in
4 the District of Columbia, but the Commission or any duly
5 authorized representative may exercise any or all of its pow-
6 ers in any place. The Commission shall hold such meetings,
7 conduct such hearings, and receive such reports as may be
8 necessary to enable it to carry out the provisions of this Act.

9 (4) There are hereby established within the Commis-
10 sion—

11 (A) a General Manager, who shall discharge such
12 of the administrative and executive functions of the
13 Commission as the Commission may direct. The Gen-
14 eral Manager shall be appointed by the President by
15 and with the advice and consent of the Senate, and shall
16 receive compensation at the rate of \$15,000 per annum.
17 The Commission may make recommendations to the
18 President with respect to the appointment or removal of
19 the General Manager.

20 (B) a Division of Research, a Division of Pro-
21 duction, a Division of Engineering, and a Division of
22 Military Application. Each division shall be under the
23 direction of a Director who shall be appointed by the
24 Commission, and shall receive compensation at the rate
25 of \$14,000 per annum. The Commission shall require

1 *each such division to exercise such of the Commission's*
2 *powers under this Act as the Commission may deter-*
3 *mine, except that the authority granted under section*
4 *3 (a) of this Act shall not be exercised by the Division*
5 *of Research.*

6 *(b) GENERAL ADVISORY COMMITTEE.—There shall be*
7 *a General Advisory Committee to advise the Commission on*
8 *scientific and technical matters relating to materials, produc-*
9 *tion, and research and development, to be composed of nine*
10 *members, who shall be appointed from civilian life by the*
11 *President. Each member shall hold office for a term of six*
12 *years, except that (1) any member appointed to fill a vacancy*
13 *occurring prior to the expiration of the term for which his*
14 *predecessor was appointed, shall be appointed for the re-*
15 *mainder of such term; and (2) the terms of office of the*
16 *members first taking office after the date of the enactment*
17 *of this Act shall expire, as designated by the President at*
18 *the time of appointment, three at the end of two years, three*
19 *at the end of four years, and three at the end of six years,*
20 *after the date of the enactment of this Act. The Committee*
21 *shall designate one of its own members as Chairman. The*
22 *Committee shall meet at least four times in every calendar*
23 *year. The members of the Committee shall receive a per diem*
24 *compensation of \$50 for each day spent in meetings or con-*
25 *ferences, and all members shall receive their necessary travel-*

1 ing or other expenses while engaged in the work of the
2 Committee.

3 (c) *MILITARY LIAISON COMMITTEE*.—There shall be
4 a Military Liaison Committee consisting of representatives
5 of the Departments of War and Navy, detailed or assigned
6 thereto, without additional compensation, by the Secretaries
7 of War and Navy in such number as they may determine.
8 The Commission shall advise and consult with the Committee
9 on all atomic energy matters which the Committee deems to
10 relate to military applications, including the development,
11 manufacture, use, and storage of bombs, the allocation of
12 fissionable material for military research, and the control
13 of information relating to the manufacture or utilization of
14 atomic weapons. The Commission shall keep the Committee
15 fully informed of all such matters before it and the Com-
16 mittee shall keep the Commission fully informed of all atomic
17 energy activities of the War and Navy Departments. The
18 Committee shall have authority to make written recommen-
19 dations to the Commission on matters relating to military
20 applications from time to time as it may deem appropriate.
21 If the Committee at any time concludes that any action,
22 proposed action, or failure to act of the Commission on such
23 matters is adverse to the responsibilities of the Departments
24 of War or Navy, derived from the Constitution, laws, and

1 *treaties, the Committee may refer such action, proposed action,*
 2 *or failure to act to the Secretaries of War and Navy. If*
 3 *either Secretary concurs, he may refer the matter to the*
 4 *President, whose decision shall be final.*

5 RESEARCH

6 *SEC. 3. (a) RESEARCH ASSISTANCE.—The Commis-*
 7 *sion is directed to exercise its powers in such manner as*
 8 *to insure the continued conduct of research and develop-*
 9 *ment activities in the fields specified below by private or*
 10 *public institutions or persons and to assist in the acquisi-*
 11 *tion of an ever-expanding fund of theoretical and prac-*
 12 *tical knowledge in such fields. To this end the Commission*
 13 *is authorized and directed to make arrangements (including*
 14 *contracts, agreements, grants-in-aid, and loans) for the con-*
 15 *duct of research and development activities relating to—*

16 (1) *nuclear processes;*

17 (2) *the theory and production of atomic energy,*
 18 *including processes, materials, and devices related to*
 19 *such production;*

20 (3) *utilization of fissionable and radioactive ma-*
 21 *terials for medical, biological, health, or military pur-*
 22 *poses;*

23 (4) *utilization of fissionable and radioactive ma-*
 24 *terials and processes entailed in the production of such*

1 materials for all other purposes, including industrial
2 uses; and

3 (5) the protection of health during research and
4 production activities.

5 The Commission may make such arrangements without regard
6 to the provisions of section 3709 of the Revised Statutes
7 (U. S. C., title 41, sec. 5) upon certification by the Com-
8 mission that such action is necessary in the interest of the
9 common defense and security, or upon a showing that adver-
10 tising is not reasonably practicable, and may make partial
11 and advance payments under such arrangements, and may
12 make available for use in connection therewith such of its
13 equipment and facilities as it may deem desirable. Such
14 arrangements shall contain such provisions to protect health,
15 to minimize danger from explosion and other hazards to life
16 or property, and to require the reporting and to permit the
17 inspection of work performed thereunder, as the Commis-
18 sion may determine; but shall not contain any provisions or
19 conditions which prevent the dissemination of scientific or
20 technical information, except to the extent such dissemination
21 is prohibited by law.

22 (b) RESEARCH BY THE COMMISSION.—The Commis-
23 sion is authorized and directed to conduct, through its own
24 facilities, activities and studies of the types specified in sub-
25 section (a) above.

1 *PRODUCTION OF FISSIONABLE MATERIAL*

2 *SEC. 4. (a) DEFINITION.—As used in this Act, the*
3 *term “produce”, when used in relation to fissionable material,*
4 *means to manufacture, produce, or refine fissionable material,*
5 *as distinguished from source materials as defined in section*
6 *5 (b) (1), or to separate fissionable material from other sub-*
7 *stances in which such material may be contained or to pro-*
8 *duce new fissionable material.*

9 *(b) PROHIBITION.—It shall be unlawful for any person*
10 *to own any facilities for the production of fissionable material*
11 *or for any person to produce fissionable material, except to*
12 *the extent authorized by subsection (c).*

13 *(c) OWNERSHIP AND OPERATION OF PRODUCTION*
14 *FACILITIES.—*

15 *(1) OWNERSHIP OF PRODUCTION FACILITIES.—*
16 *The Commission shall be the exclusive owner of all*
17 *facilities for the production of fissionable material other*
18 *than facilities which (A) are useful in the conduct of*
19 *research and development activities in the fields speci-*
20 *fied in section 3, and (B) do not, in the opinion of*
21 *the Commission, have a potential production rate ade-*
22 *quate to enable the operator of such facilities to produce*
23 *within a reasonable period of time a sufficient quantity*
24 *of fissionable material to produce an atomic bomb or*
25 *any other atomic weapon.*

(2) OPERATION OF THE COMMISSION'S PRODUCTION FACILITIES.—The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be

made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) OPERATION OF OTHER PRODUCTION FACILITIES.—Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) IRRADIATION OF MATERIALS.—For the purpose of increasing the supply of radioactive materials, the Commission is authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

CONTROL OF MATERIALS

SEC. 5. (a) FISSIONABLE MATERIALS.—

(1) DEFINITION.—As used in this Act, the term “fissionable material” means plutonium, uranium enriched in the isotope 235, any other material which the Commission

1 determines to be capable of releasing substantial quantities
2 of energy through nuclear chain reaction of the material, or
3 any material artificially enriched by any of the foregoing;
4 but does not include source materials, as defined in section
5 5 (b) (1).

6 (2) *GOVERNMENT OWNERSHIP OF ALL FISSIONABLE*
7 *MATERIAL.*—All right, title, and interest within or under
8 the jurisdiction of the United States, in or to any fissionable
9 material, now or hereafter produced, shall be the property
10 of the Commission, and shall be deemed to be vested in
11 the Commission by virtue of this Act. Any person owning
12 any interest in any fissionable material at the time of the
13 enactment of this Act, or owning any interest in any ma-
14 terial at the time when such material is hereafter determined
15 to be a fissionable material, or who lawfully produces any
16 fissionable material incident to privately financed research
17 or development activities, shall be paid just compensation
18 therefor. The Commission may, by action consistent with
19 the provisions of paragraph (4) below, authorize any such
20 person to retain possession of such fissionable material, but
21 no person shall have any title in or to any fissionable material.

22 (3) *PROHIBITION.*—It shall be unlawful for any person,
23 after sixty days from the effective date of this Act to (A)
24 possess or transfer any fissionable material, except as author-
25 ized by the Commission, or (B) export from or import into

1 the United States any fissionable material, or (C) directly
2 or indirectly engage in the production of any fissionable
3 material outside of the United States.

4 (4) DISTRIBUTION OF FISSIONABLE MATERIAL.—

5 Without prejudice to its continued ownership thereof, the
6 Commission is authorized to distribute fissionable material,
7 with or without charge, to applicants requesting such material
8 (A) for the conduct of research or development activities
9 either independently or under contract or other arrangement
10 with the Commission, (B) for use in medical therapy, or
11 (C) for use pursuant to a license issued under the authority
12 of section 7. Such material shall be distributed in such
13 quantities and on such terms that no applicant will be en-
14 abled to obtain an amount sufficient to construct a bomb
15 or other military weapon. The Commission is directed to
16 distribute sufficient fissionable material to permit the con-
17 duct of widespread independent research and development
18 activity, to the maximum extent practicable. In deter-
19 mining the quantities of fissionable material to be distributed,
20 the Commission shall make such provisions for its own needs
21 and for the conservation of fissionable material as it may
22 determine to be necessary in the national interest for the
23 future development of atomic energy. The Commission shall
24 not distribute any material to any applicant, and shall recall
25 any distributed material from any applicant, who is not

1 equipped to observe or who fails to observe such safety
2 standards to protect health and to minimize danger from
3 explosion or other hazard to life or property as may be
4 established by the Commission, or who uses such material
5 in violation of law or regulation of the Commission or in a
6 manner other than as disclosed in the application therefor.

7 (5) The Commission is authorized to purchase or other-
8 wise acquire any fissionable material or any interest therein
9 outside the United States, or any interest in facilities for the
10 production of fissionable material, or in real property on
11 which such facilities are located, without regard to the pro-
12 visions of section 3709 of the Revised Statutes (U. S. C.,
13 title 41, sec. 5) upon certification by the Commission that
14 such action is necessary in the interest of the common defense
15 and security, or upon a showing that advertising is not rea-
16 sonably practicable, and partial and advance payments may
17 be made under contracts for such purposes. The Commis-
18 sion is further authorized to take, requisition, or condemn,
19 or otherwise acquire any interest in such facilities or real
20 property, and just compensation shall be made therefor.

21 (b) SOURCE MATERIALS.—

22 (1) DEFINITION.—As used in this Act, the term
23 “source material” means uranium, thorium, or any other
24 material which is determined by the Commission, with
25 the approval of the President, to be peculiarly essential to

1 the production of fissionable materials; but includes ores
2 only if they contain one or more of the foregoing materials
3 in such concentration as the Commission may by regulation
4 determine from time to time.

5 (2) *LICENSE FOR TRANSFERS REQUIRED.*—Unless
6 authorized by a license issued by the Commission, no person
7 may transfer or deliver and no person may receive possession
8 of or title to any source material after removal from its place
9 of deposit in nature, except that licenses shall not be required
10 for quantities of source materials which, in the opinion of the
11 Commission, are unimportant.

12 (3) *ISSUANCE OF LICENSES.*—The Commission shall
13 establish such standards for the issuance, refusal, or revoca-
14 tion of licenses as it may deem necessary to assure adequate
15 source materials for production, research, or development
16 activities pursuant to this Act or to prevent the use of such
17 materials in a manner inconsistent with the national welfare.
18 Licenses shall be issued in accordance with such procedures
19 as the Commission may by regulation establish.

20 (4) *REPORTING.*—The Commission is authorized to
21 issue such regulations or orders requiring reports of owner-
22 ship, possession, extraction, refining, shipment, or other
23 handling of source materials as it may deem necessary, except
24 that such reports shall not be required with respect to (A)
25 any source material prior to removal from its place of deposit

1 in nature, or (B) quantities of source materials which in the
2 opinion of the Commission are unimportant or the reporting
3 of which will discourage independent prospecting for new
4 deposits.

5 (5) ACQUISITION.—The Commission is authorized and
6 directed to purchase, take, requisition, condemn, or otherwise
7 acquire, supplies of source materials or any interest in real
8 property containing deposits of source materials to the extent
9 it deems necessary to effectuate the provisions of this Act.
10 Any purchase made under this paragraph may be made
11 without regard to the provisions of section 3709 of the Revised
12 Statutes (U. S. C., title 41, sec. 5) upon certification by the
13 Commission that such action is necessary in the interest of the
14 common defense and security, or upon a showing that adver-
15 tising is not reasonably practicable, and partial and advance
16 payments may be made thereunder. The Commission may
17 establish guaranteed prices for all source materials delivered
18 to it within a specified time. Just compensation shall be
19 made for any property taken, requisitioned, or condemned
20 under this paragraph.

21 (6) EXPLORATION.—The Commission is authorized to
22 conduct and enter into contracts for the conduct of exploratory
23 operations, investigations, and inspections to determine the
24 location, extent, mode of occurrence, use, or conditions of
25 deposits or supplies of source materials, making just compen-

1 sation for any damage or injury occasioned thereby. Such
2 exploratory operations may be conducted only with the consent
3 of the owner, but such investigations and inspections may be
4 conducted with or without such consent.

5 (7) PUBLIC LANDS.—All uranium, thorium, and all
6 other materials determined pursuant to paragraph (1) of
7 this subsection to be peculiarly essential to the production of
8 fissionable material, contained, in whatever concentration, in
9 deposits in the public lands are hereby reserved for the use
10 of the United States; except that with respect to any location,
11 entry, or settlement made prior to the date of enactment of
12 this Act no reservation shall be deemed to have been made,
13 if such reservation would deprive any person of any existing
14 or inchoate rights or privileges to which he would otherwise
15 be entitled or would otherwise enjoy. The Secretary of
16 the Interior shall cause to be inserted in every patent, con-
17 veyance, lease, permit, or other authorization hereafter granted
18 to use the public lands or their mineral resources, under any
19 of which there might result the extraction of any materials
20 so reserved, a reservation to the United States of all such
21 materials, whether or not of commercial value, together with
22 the right of the United States through its authorized agents
23 or representatives at any time to enter upon the land and
24 prospect for, mine, and remove the same, making just com-
25 pensation for any damage or injury occasioned thereby. Any

1 lands so patented, conveyed, leased, or otherwise disposed of
2 may be used, and any rights under any such permit or
3 authorization may be exercised, as if no reservation of such
4 materials had been made under this subsection; except that,
5 when such use results in the extraction of any such material
6 from the land in quantities which may not be transferred or
7 delivered without a license under this subsection, such ma-
8 terial shall be the property of the Commission and the Com-
9 mission may require delivery of such material to it by any
10 possessor thereof after such material has been separated as
11 such from the ores in which it was contained. If the Com-
12 mission requires the delivery of such material to it, it shall pay
13 to the person mining or extracting the same, or to such other
14 person as the Commission determines to be entitled thereto,
15 such sums, including profits, as the Commission deems fair
16 and reasonable for the discovery, mining, development, pro-
17 duction, extraction, and other services performed with respect
18 to such material prior to such delivery, but such payment shall
19 not include any amount on account of the value of such ma-
20 terial before removal from its place of deposit in nature. If
21 the Commission does not require delivery of such material to
22 it, the reservation made pursuant to this paragraph shall be
23 of no further force or effect.

24 (c) BYPRODUCT MATERIALS.—

1 (1) *DEFINITION.*—As used in this Act, the term
2 “byproduct material” means any radioactive material (ex-
3 cept fissionable material) yielded in or made radioactive by
4 exposure to the radiation incident to the processes of produc-
5 ing or utilizing fissionable material.

6 (2) *DISTRIBUTION.*—The Commission is authorized
7 to distribute, with or without charge, byproduct materials
8 to applicants seeking such materials for research or develop-
9 ment activity, medical therapy, industrial uses, or such other
10 useful applications as may be developed. In distributing
11 such materials, the Commission shall give preference to
12 applicants proposing to use such materials in the conduct of
13 research and development activity or medical therapy. The
14 Commission shall not distribute any byproduct materials to
15 any applicant, and shall recall any distributed materials from
16 any applicant, who is not equipped to observe or who fails
17 to observe such safety standards to protect health as may be
18 established by the Commission or who uses such materials
19 in violation of law or regulation of the Commission or in a
20 manner other than as disclosed in the application therefor.

21 (d) *GENERAL PROVISIONS.*—

22 (1) The Commission shall not distribute any fissionable
23 or source material to any person for a use which is not under
24 or within the jurisdiction of the United States or to any
25 foreign government.

1 (2) *The Commission shall establish by regulation a*
2 *procedure by which any person who is dissatisfied with*
3 *the distribution or refusal to distribute to him, or the recall*
4 *from him, of any fissionable or byproduct materials or with*
5 *the issuance, refusal, or revocation of a license to him for the*
6 *transfer or receipt of source materials may obtain a review*
7 *of such determination by a board of appeal consisting of three*
8 *members appointed by the Commission. The Commission*
9 *may in its discretion review and revise any decision of such*
10 *board of appeal.*

11 *MILITARY APPLICATIONS OF ATOMIC*
12 *ENERGY*

13 *SEC. 6. (a) AUTHORITY.—The Commission is author-*
14 *ized to—*

15 (1) *conduct experiments and do research and de-*
16 *velopment work in the military application of atomic*
17 *energy; and*

18 (2) *engage in the production of atomic bombs,*
19 *atomic bomb parts, or other military weapons utilizing*
20 *fissionable materials; except that such activities shall be*
21 *carried on only to the extent that the express consent*
22 *and direction of the President of the United States*
23 *has been obtained, which consent and direction shall*
24 *be obtained at least once each year.*

25 *The President from time to time may direct the Commission*

1 to deliver such quantities of weapons to the armed forces for
2 such use as he deems necessary in the interest of national
3 defense.

4 (b) *PROHIBITION.*—It shall be unlawful for any person
5 to manufacture or produce any device or equipment designed
6 to utilize fissionable material as a military weapon except as
7 may be (1) incident to research and development activities
8 or (2) authorized by the Commission. Nothing in this sub-
9 section shall be deemed to modify the provisions of section 4
10 of this Act.

11 UTILIZATION OF ATOMIC ENERGY

12 SEC. 7. (a) *LICENSE REQUIRED.*—It shall be unlawful,
13 except as provided in sections 5 (a) (4) (A) or (B) or
14 6 (a), for any person to manufacture any equipment or
15 device utilizing fissionable material or atomic energy or to
16 utilize fissionable material or atomic energy with or without
17 such equipment or device, except under and in accordance
18 with a license issued by the Commission authorizing such
19 manufacture or utilization. No license may permit any
20 such activity if fissionable material is produced incident to
21 such activity, except as provided in sections 3 and 4. Nothing
22 in this section shall be deemed to require a license for the
23 conduct of research or development activities relating to the
24 manufacture of such equipment or devices or the utilization

1 of fissionable material or atomic energy, or for the manufac-
2 ture or use of equipment or devices for medical therapy.

3 (b) *REPORT TO CONGRESS.*—Whenever in its opinion
4 any industrial, commercial, or other nonmilitary use of fis-
5 sionable material or atomic energy has been sufficiently
6 developed to be of practical value, the Commission shall pre-
7 pare a report to the President stating all the facts with respect
8 to such use, the Commission's estimate of the social, political,
9 economic, and international effects of such use and the Com-
10 mission's recommendations for necessary or desirable supple-
11 mental legislation. The President shall then transmit this
12 report to the Congress together with his recommendations.
13 No license for any manufacture or use shall be issued by the
14 Commission under this section until after (1) a report with
15 respect to such manufacture or use has been filed with the
16 Congress; and (2) a period of ninety days in which the Con-
17 gress was in session has elapsed after the report has been so
18 filed. In computing such period of ninety days, there shall
19 be excluded the days on which either House is not in session
20 because of an adjournment of more than three days.

21 (c) *ISSUANCE OF LICENSES.*—After such ninety-day
22 period, unless hereafter prohibited by law, the Commission
23 may license such manufacture or use in accordance with such
24 procedures and subject to such conditions as it may by regu-
25 lation establish to effectuate the provisions of this Act. The

1 Commission is authorized and directed to issue licenses on a
2 nonexclusive basis and to supply to the extent available
3 appropriate quantities of fissionable material to licensees (1)
4 whose proposed activities will serve some useful purpose
5 proportionate to the quantities of fissionable material to be
6 consumed; (2) who are equipped to observe such safety
7 standards to protect health and to minimize danger from
8 explosion or other hazard to life or property as the Commis-
9 sion may establish; and (3) who agree to make available to
10 the Commission such technical information and data concern-
11 ing their activities pursuant to such licenses as the Commis-
12 sion may determine necessary to encourage similar activities
13 by as many licensees as possible. Each such license shall be
14 issued for a specified period, not to exceed one year, shall be
15 revocable at any time by the Commission in accordance with
16 such procedures as the Commission may establish, and may be
17 renewed upon the expiration of such period. Where activi-
18 ties under any license might serve to maintain or to foster the
19 growth of monopoly, restraint of trade, unlawful competition,
20 or other trade position inimical to the entry of new, freely
21 competitive enterprises in the field, the Commission is author-
22 ized and directed to refuse to issue such license or to establish
23 such conditions to prevent these results as the Commission, in
24 consultation with the Attorney General, may determine.
25 The Commission shall report promptly to the Attorney Gen-

1 eral any information it may have with respect to any utili-
2 zation of fissionable material or atomic energy which appears
3 to have these results. No license may be given to any
4 person for activities which are not under or within the
5 jurisdiction of the United States or to any foreign gov-
6 ernment.

7 (d) *BYPRODUCT POWER*.—If energy which may be
8 utilized is produced in the production of fissionable material,
9 such energy may be used by the Commission, transferred
10 to other Government agencies, or sold to public or private
11 utilities under contracts providing for reasonable resale prices.

12 INTERNATIONAL ARRANGEMENTS

13 SEC. 8. (a) *DEFINITION*.—As used in this Act, the
14 term “international arrangement” shall mean any treaty
15 approved by the Senate or international agreement approved
16 by the Congress, during the time such treaty or agreement is
17 in full force and effect.

18 (b) *EFFECT OF INTERNATIONAL ARRANGEMENTS*.—
19 Any provision of this Act or any action of the Commission
20 to the extent that it conflicts with the provisions of any
21 international arrangement made after the date of enactment
22 of this Act shall be deemed to be of no further force or effect.

23 (c) *POLICIES CONTAINED IN INTERNATIONAL AR-*
24 *RANGEMENTS*.—In the performance of its functions under

1 *this Act, the Commission shall give maximum effect to the*
2 *policies contained in any such international arrangement.*

3 *PROPERTY OF THE COMMISSION*

4 *SEC. 9. (a) The President shall direct the transfer to*
5 *the Commission of all interests owned by the United States*
6 *or any Government agency in the following property:*

7 *(1) All fissionable material; all atomic weapons and*
8 *parts thereof; all facilities, equipment, and materials for*
9 *the processing, production, or utilization of fissionable ma-*
10 *terial or atomic energy; all processes and technical infor-*
11 *mation of any kind, and the source thereof (including data,*
12 *drawings, specifications, patents, patent applications, and*
13 *other sources) relating to the processing, production, or utili-*
14 *zation of fissionable material or atomic energy; and all con-*
15 *tracts, agreements, leases, patents, applications for patents,*
16 *inventions and discoveries (whether patented or unpatented),*
17 *and other rights of any kind concerning any such items;*

18 *(2) All facilities, equipment, and materials, devoted*
19 *primarily to atomic energy research and development; and*

20 *(3) Such other property owned by or in the custody*
21 *or control of the Manhattan Engineer District or other Gov-*
22 *ernment agencies as the President may determine.*

23 *(b) In order to render financial assistance to those*
24 *States and localities in which the activities of the Com-*

1 mission are carried on and in which the Commission has ac-
2 quired property previously subject to State and local tax-
3 ation, the Commission is authorized to make payments to
4 State and local governments in lieu of property taxes. Such
5 payments may be in the amounts, at the times, and upon the
6 terms the Commission deems appropriate, but the Commis-
7 sion shall be guided by the policy of not making payments
8 in excess of the taxes which would have been payable for
9 such property in the condition in which it was acquired,
10 except in cases where special burdens have been cast upon
11 the State or local government by activities of the Commission,
12 the Manhattan Engineer District or their agents. In any
13 such case, any benefit accruing to the State or local gov-
14 ernment by reason of such activities shall be considered in
15 determining the amount of the payment. The Commission,
16 and the property, activities, and income of the Commission,
17 are hereby expressly exempted from taxation in any manner
18 or form by any State, county, municipality, or any sub-
19 division thereof.

20 CONTROL OF INFORMATION

21 SEC. 10. (a) POLICY.—It shall be the policy of the
22 Commission to control the dissemination of restricted data in
23 such a manner as to assure the common defense and security.
24 Consistent with such policy, the Commission shall be guided
25 by the following principles:

(1) *That information with respect to the use of atomic energy for industrial purposes should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established; and*

(2) *That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.*

(b) *DISSEMINATION.*—*The Commission is authorized and directed to establish such information services, publications, libraries, and other registers of available information as it may deem necessary or desirable to provide for the dissemination of information in accordance with subsection (a).*

(c) *RESTRICTIONS.*—

(1) *The term “restricted data” as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security.*

1 (2) Whoever, lawfully or unlawfully, having possession
2 of, access to, control over, or being entrusted with, any docu-
3 ment, writing, sketch, photograph, plan, model, instrument,
4 appliance, note or information involving or incorporating
5 restricted data—

6 (A) communicates, transmits, or discloses the same
7 to any individual or person, or attempts or conspires to do
8 any of the foregoing, with intent to injure the United
9 States or with intent to secure an advantage to any foreign
10 nation, upon conviction thereof, shall be punished by a
11 fine of not more than \$20,000 or imprisonment for not
12 more than twenty years, or both;

13 (B) communicates, transmits, or discloses the same
14 to any individual or person, or attempts or conspires to
15 do any of the foregoing, with reason to believe such data
16 will be utilized to injure the United States or to secure an
17 advantage to any foreign nation, shall, upon conviction,
18 be punished by a fine of not more than \$10,000 or im-
19 prisonment for not more than ten years, or both.

20 (3) Whoever, with intent to injure the United States
21 or with intent to secure an advantage to any foreign nation,
22 acquires or attempts or conspires to acquire any document,
23 writing, sketch, photograph, plan, model, instrument, ap-
24 pliance, note or information involving or incorporating
25 restricted data shall, upon conviction thereof, be punished

1 by a fine of not more than \$20,000 or imprisonment for not
2 more than twenty years, or both.

3 (4) Whoever, with intent to injure the United States or
4 with intent to secure an advantage to any foreign nation,
5 removes, conceals, tampers with, alters, mutilates, or destroys
6 any document, writing, sketch, photograph, plan, model, in-
7 strument, appliance, or note involving or incorporating re-
8 stricted data and used by any individual or person in
9 connection with the production of fissionable material, or
10 research or development relating to atomic energy, conducted
11 by the United States, or financed in whole or in part by
12 Federal funds, or conducted with the aid of fissionable
13 material, shall be punished by a fine of not more than \$20,000
14 or imprisonment for not more than twenty years or both.

15 (5) No person shall be prosecuted for any violation
16 under this section unless and until the Attorney General of
17 the United States has advised and consulted with the Com-
18 mission with respect to such prosecution.

19 (6) This section shall not exclude the applicable pro-
20 visions of any other laws, except that no Government agency
21 shall take any action under such other laws inconsistent with
22 the provisions of this section.

23 (d) INSPECTIONS, RECORDS, AND REPORTS.—The
24 Commission is—

(1) authorized by regulation or order to require such reports and the keeping of such records with respect to, and to provide for such inspections of, activities and studies of types specified in section 3 and of activities under licenses issued pursuant to section 7 as the Commission may determine;

(2) authorized and directed by regulation or order to require regular reports and records with respect to, and to provide for frequent inspections of, the production of fissionable material in the conduct of research and development activities.

PATENTS AND INVENTIONS

SEC. 11. (a) PRODUCTION AND MILITARY UTILIZATION.—

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any patent granted for any such invention or discovery is hereby revoked, and just compensation shall be made therefor.

(2) No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any rights con-

ferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(3) Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon shall file with the Commission a report containing a complete description thereof, unless such invention or discovery is described in an application for a patent filed in the Patent Office by such person within the time required for the filing of such report. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (A) The sixtieth day after the date of enactment of this Act; (B) the sixtieth day after the completion of such invention or discovery; or (C) the sixtieth day after such person first discovers or first has reason to believe that such invention or discovery is useful in such production or utilization.

(b) *USE OF INVENTIONS FOR RESEARCH.*—No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for

1 any invention or discovery are hereby revoked to the extent
2 that such invention or discovery is so used, and just compen-
3 sation shall be made therefor.

4 (c) NONMILITARY UTILIZATION.—

5 (1) It shall be the duty of the Commission to declare
6 any patent to be affected with the public interest if (A) the
7 invention or discovery covered by the patent utilizes or is
8 essential in the utilization of fissionable material or atomic
9 energy; and (B) the licensing of such invention or discovery
10 under this subsection is necessary to effectuate the policies
11 and purposes of this Act.

12 (2) Whenever any patent has been declared, pursuant
13 to paragraph (1), to be affected with the public interest—

14 (A) The Commission is hereby licensed to use the
15 invention or discovery covered by such patent in per-
16 forming any of its powers under this Act; and

17 (B) Any person to whom a license has been issued
18 under section 7 is hereby licensed to use the invention
19 or discovery covered by such patent to the extent such
20 invention or discovery is used by him in carrying on
21 the activities authorized by his license under section 7.

22 The owner of the patent shall be entitled to a reasonable
23 royalty fee for any use of an invention or discovery licensed
24 by this subsection. Such royalty fee may be agreed upon
25 by such owner and the licensee, or in the absence of such
26 agreement shall be determined by the Commission.

1 (3) No court shall have jurisdiction or power to stay,
2 restrain, or otherwise enjoin the use of any invention or
3 discovery by a licensee, to the extent that such use is licensed
4 by paragraph (2) above, on the ground of infringement of
5 any patent. If in any action for infringement against
6 such licensee the court shall determine that the defendant
7 is exercising such license, the measure of damages shall be
8 the royalty fee determined pursuant to this section, together
9 with such costs, interest, and reasonable attorney's fees as
10 may be fixed by the court. If no royalty fee has been
11 determined, the court shall stay the proceeding until the
12 royalty fee is determined pursuant to this section. If any
13 such licensee shall fail to pay such royalty fee, the patentee
14 may bring an action in any court of competent jurisdiction
15 for such royalty fee, together with such costs, interest, and
16 reasonable attorney's fees as may be fixed by the court.

17 (d) ACQUISITION OF PATENTS.—The Commission
18 is authorized to purchase, or to take, requisition, or con-
19 demn, and make just compensation for, (1) any invention or
20 discovery which is useful in the production of fissionable
21 material or in the utilization of fissionable material or
22 atomic energy for a military weapon, or which utilizes
23 or is essential in the utilization of fissionable material or
24 atomic energy, or (2) any patent or patent application
25 covering any such invention or discovery. The Commis-

1 sioner of Patents shall notify the Commission of all ap-
2 plications for patents heretofore or hereafter filed which
3 in his opinion disclose such inventions or discoveries and
4 shall provide the Commission access to all such applications.

5 (e) COMPENSATION AWARDS, AND ROYALTIES.—

6 (1) PATENT COMPENSATION BOARD.—The Commis-
7 sion shall designate a Patent Compensation Board, consisting
8 of two or more employees of the Commission, to consider
9 applications under this subsection.

10 (2) ELIGIBILITY.—

11 (A) Any owner of a patent licensed under sub-
12 section (c) (2) or any licensee thereunder may make
13 application to the Commission for the determination of
14 a reasonable royalty fee in accordance with such pro-
15 cedures as it by regulation may establish.

16 (B) Any person seeking to obtain the just com-
17 pensation provided in subsections (a), (b), or (d)
18 shall make application therefor to the Commission in
19 accordance with such procedures as it may by regulation
20 establish.

21 (C) Any person making any invention or discovery
22 useful in the production of fissionable material or in the
23 utilization of fissionable material or atomic energy for a
24 military weapon who is not entitled to compensation
25 therefor under subsection (a) and who has complied

1 with subsection (a) (3) above may make application
2 to the Commission for, and the Commission may grant,
3 an award.

4 (D) Any person making application under this sub-
5 section shall have the right to be represented by counsel.

6 (3) STANDARDS.—

7 (A) In determining such reasonable royalty fee,
8 the Commission shall take into consideration any defense,
9 general or special, that might be pleaded by a defendant
10 in an action for infringement, the extent to which, if any,
11 such patent was developed through federally financed
12 research, the degree of utility, novelty, and importance
13 of the invention or discovery, and may consider the cost
14 to the owner of the patent of developing such invention
15 or discovery or acquiring such patent.

16 (B) In determining what constitutes just compensa-
17 tion under subsection (a), (b), or (d) above, the Com-
18 mission shall take into account the considerations set
19 forth in paragraph (A) above, and the actual use of
20 such invention or discovery, and may determine that
21 such compensation be paid in periodic payments or in a
22 lump sum.

23 (C) In determining the amount of any award under
24 paragraph (2) (C) of this subsection, the Commission
25 shall take into account the considerations set forth in

1 paragraph (A) above, and the actual use of such inven-
2 tion or discovery. Awards so made may be paid by the
3 Commission in periodic payments or in a lump sum.

4 (4) JUDICIAL REVIEW.—Any person aggrieved by any
5 determination of the Commission of an award or of a reason-
6 able royalty fee may obtain a review of such determination in
7 the Court of Appeals for the District of Columbia by filing in
8 such court, within thirty days after notice of such determina-
9 tion, a written petition praying that such determination be set
10 aside. A copy of such petition shall be forthwith served upon
11 the Commission and thereupon the Commission shall file with
12 the court a certified transcript of the entire record in the
13 proceeding, including the findings and conclusions upon
14 which the determination was based. Upon the filing of
15 such transcript the court shall have exclusive jurisdiction
16 upon the record certified to it to affirm the determination in
17 its entirety or set it aside and remand it to the Commission
18 for further proceedings. The findings of the Commission
19 as to the facts, if supported by substantial evidence, shall
20 be conclusive. The court's judgment shall be final, subject,
21 however, to review by the Supreme Court of the United
22 States upon writ of certiorari on petition therefor under
23 section 240 of the Judicial Code (U. S. C., title 28, sec.
24 347), by the Commission or any party to the court pro-
25 ceeding.

GENERAL AUTHORITY

SEC. 12. (a) In the performance of its functions the Commission is authorized to—

(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and byproduct materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this Act, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony

1 *Act of February 11, 1893 (U. S. C., title 49, sec. 46),*
2 *shall apply with respect to any individual who spe-*
3 *cifically claims such privilege. Witnesses subpoenaed*
4 *under this subsection shall be paid the same fees and*
5 *mileage as are paid witnesses in the district courts of*
6 *the United States;*

7 *(4) appoint and fix the compensation of such offi-*
8 *cers and employees as may be necessary to carry out*
9 *the functions of the Commission. Such officers and*
10 *employees shall be appointed in accordance with the*
11 *civil-service laws and their compensation fixed in ac-*
12 *cordance with the Classification Act of 1923, as amended,*
13 *except that to the extent the Commission deems such*
14 *action necessary to the discharge of its responsibilities,*
15 *personnel may be employed and their compensation*
16 *fixed without regard to such laws. Attorneys appointed*
17 *under this paragraph may appear for and represent the*
18 *Commission in any case in any court. The Commission*
19 *shall make adequate provision for administrative review*
20 *of any determination to dismiss any employee;*

21 *(5) acquire such materials, property, equipment,*
22 *and facilities, establish or construct such buildings and*
23 *facilities, and modify such buildings and facilities from*
24 *time to time as it may deem necessary, and construct,*
25 *acquire, provide, or arrange for such facilities and serv-*

ices (at project sites where such facilities and services are not available) for the housing, health, safety, welfare, and recreation of personnel employed by the Commission as it may deem necessary;

(6) with the consent of the agency concerned, utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this Act;

(8) contract for the expenditure of funds for the purposes specified in section 10 (b) without regard to the provisions of section 87 of the Act of January 12, 1895 (28 Stat. 622), and section 11 of the Act of March 1, 1919 (40 Stat. 1270; U. S. C., title 44, sec. 111); and

(9) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

1 (b) SECURITY.—The President may, in advance, ex-
2 empt any specific action of the Commission in a particular
3 matter from the provisions of law relating to contracts when-
4 ever he determines that such action is essential in the interest
5 of the common defense and security.

6 *COMPENSATION FOR PRIVATE PROPERTY*
7 *ACQUIRED*

8 SEC. 13. (a) The United States shall make just com-
9 pensation for any property or interests therein taken or
10 requisitioned pursuant to sections 5 and 11. The Commis-
11 sion shall determine such compensation. If the compensation
12 so determined is unsatisfactory to the person entitled thereto,
13 such person shall be paid 50 per centum of the amount so
14 determined, and shall be entitled to sue the United States in
15 the Court of Claims or in any district court of the United
16 States in the manner provided by sections 24 (20) and 145
17 of the Judicial Code to recover such further sum as added
18 to said 50 per centum will make up such amount as will be
19 just compensation.

(b) In the exercise of the rights of eminent domain and condemnation, proceedings may be instituted under the Act of August 1, 1888 (U. S. C., title 40, sec. 257), or any other applicable Federal statute. Upon or after the filing of the condemnation petition, immediate possession may be taken and the property may be occupied, used, and improved for

1 the purposes of this Act, notwithstanding any other law.
2 Real property acquired by purchase, donation, or other means
3 of transfer may also be occupied, used, and improved for the
4 purposes of this Act, prior to approval of title by the Attorney
5 General.

6 JOINT COMMITTEE ON ATOMIC ENERGY

7 SEC. 14. (a) There is hereby established a Joint Com-
8 mittee on Atomic Energy to be composed of nine Members
9 of the Senate to be appointed by the President of the Sen-
10 ate, and nine Members of the House of Representatives to
11 be appointed by the Speaker of the House of Representa-
12 tives. In each instance not more than five members shall
13 be members of the same political party.

14 (b) The joint committee shall make continuing studies
15 of the activities of the Atomic Energy Commission and of
16 problems relating to the development, use, and control of
17 atomic energy. The Commission shall keep the joint com-
18 mittee fully and currently informed with respect to the
19 Commission's activities. All bills, resolutions, and other
20 matters in the Senate or the House of Representatives re-
21 lating primarily to the Commission or to the development, use,
22 or control of atomic energy shall be referred to the joint com-
23 mittee. The members of the joint committee who are Mem-
24 bers of the Senate shall from time to time report to the Senate,
25 and the members of the joint committee who are Members

1 of the House of Representatives shall from time to time
2 report to the House, by bill or otherwise, their recommen-
3 dations with respect to matters within the jurisdiction of their
4 respective Houses which are (1) referred to the joint com-
5 mittee or (2) otherwise within the jurisdiction of the joint
6 committee.

7 (c) Vacancies in the membership of the joint commit-
8 tee shall not affect the power of the remaining members
9 to execute the functions of the joint committee, and shall
10 be filled in the same manner as in the case of the original
11 selection. The joint committee shall select a chairman and
12 a vice chairman from among its members.

13 (d) The joint committee, or any duly authorized sub-
14 committee thereof, is authorized to hold such hearings, to
15 sit and act at such places and times, to require, by subpoena
16 or otherwise, the attendance of such witnesses and the
17 production of such books, papers, and documents, to admin-
18 ister such oaths, to take such testimony, to procure such
19 printing and binding, and to make such expenditures as it
20 deems advisable. The cost of stenographic services to report
21 such hearings shall not be in excess of 25 cents per hundred
22 words. The provisions of sections 102 to 104, inclusive, of
23 the Revised Statutes shall apply in case of any failure of any
24 witness to comply with a subpoena or to testify when sum-
25 moned under authority of this section.

(e) The joint committee is empowered to appoint and fix the compensation of such experts, consultants, technicians, and clerical and stenographic assistants as it deems necessary and advisable, but the compensation so fixed shall not exceed the compensation prescribed under the Classification Act of 1923, as amended, for comparable duties. The committee is authorized to utilize the services, information, facilities, and personnel of the departments and establishments of the Government.

ENFORCEMENT

SEC. 15. (a) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of sections 4 (b), 5 (a) (3), or 6 (b) shall, upon conviction thereof, be punished by a fine of not more than \$10,000 or by imprisonment for not more than five years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(b) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this Act other than those specified in subsection (a) and other than section 10 (c), or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (d), or 12 (a) (2), shall, upon

1 conviction thereof, be punished by a fine of not more than
2 \$5,000 or by imprisonment for not more than two years,
3 or both, except that whoever commits such an offense with
4 intent to injure the United States or with intent to secure
5 an advantage to any foreign nation shall, upon conviction
6 thereof, be punished by a fine of not more than \$20,000 or
7 by imprisonment for not more than twenty years, or both.

8 (c) Whenever in the judgment of the Commission any
9 person has engaged or is about to engage in any acts or
10 practices which constitute or will constitute a violation of
11 any provision of this Act, or any regulation or order issued
12 thereunder, it may make application to the appropriate court
13 for an order enjoining such acts or practices, or for an order
14 enforcing compliance with such provision, and upon a show-
15 ing by the Commission that such person has engaged or is
16 about to engage in any such acts or practices a permanent
17 or temporary injunction, restraining order, or other order
18 shall be granted without bond.

19 (d) In case of failure or refusal to obey a subpoena
20 served upon any person pursuant to section 12 (a) (3), the
21 district court for any district in which such person is found
22 or resides or transacts business, upon application by the
23 Commission, shall have jurisdiction to issue an order requir-
24 ing such person to appear and give testimony or to appear
25 and produce documents, or both, in accordance with the

1 *subpena; and any failure to obey such order of the court*
2 *may be punished by such court as a contempt thereof.*

3 *REPORTS*

4 *SEC. 16. The Commission shall submit to the Congress,*
5 *in January and July of each year, a report concerning the*
6 *activities of the Commission. The Commission shall include*
7 *in such report, and shall at such other times as it deems de-*
8 *sirable submit to the Congress, such recommendations for*
9 *additional legislation as the Commission deems necessary or*
10 *desirable.*

11 *DEFINITIONS*

12 *SEC. 17. As used in this Act—*

13 *(a) The term “atomic energy” shall include all forms*
14 *of energy liberated in the transmutation of atomic species.*

15 *(b) The term “Government agency” means any execu-*
16 *tive department, commission, independent establishment, cor-*
17 *poration wholly or partly owned by the United States which*
18 *is an instrumentality of the United States, board, bureau,*
19 *division, service, office, officer, authority, administration, or*
20 *other establishment, in the executive branch of the Govern-*
21 *ment.*

22 *(c) The term “person” means any individual, corpora-*
23 *tion, partnership, firm, association, trust, estate, public or*
24 *private institution, group, the United States or any agency*
25 *thereof, any government other than the United States, any*

1 political subdivision of any such government, and any legal
 2 successor, representative, agent, or agency of the foregoing,
 3 or other entity, but shall not include the Commission or offi-
 4 cers or employees of the Commission in the exercise of duly
 5 authorized functions.

6 (d) The term "United States", when used in a geo-
 7 graphical sense, includes all Territories and possessions of
 8 the United States.

9 (e) The term "research and development" means theo-
 10 retical analysis, exploration, and experimentation, and the
 11 extension of investigative findings and theories of a scientific
 12 or technical nature into practical application for experimental
 13 and demonstration purposes, including the experimental pro-
 14 duction and testing of models, devices, equipment, materials,
 15 and processes.

16 APPROPRIATIONS

17 SEC. 18. (a) There are hereby authorized to be appro-
 18 priated such sums as may be necessary and appropriate to
 19 carry out the provisions and purposes of this Act. The Acts
 20 appropriating such sums may appropriate specified portions
 21 thereof to be accounted for upon the certification of the
 22 Commission only. Funds appropriated to the Commission
 23 shall, if obligated by contract during the fiscal year for
 24 which appropriated, remain available for expenditure for
 25 four years following the expiration of the fiscal year for

1 *which appropriated. After such four-year period, the un-*
2 *expended balances of appropriations shall be carried to the*
3 *surplus fund and covered into the Treasury.*

4 *(b) Such part as the President may determine of the*
5 *unexpended balances of appropriations, allocations, or other*
6 *funds available for expenditure in connection with the Man-*
7 *hattan Engineer District are hereby transferred to the Com-*
8 *mission and shall be available for expenditure for the purpose*
9 *of carrying out the provisions of this Act.*

10 *SEPARABILITY OF PROVISIONS*

11 *SEC. 19. If any provision of this Act, or the applica-*
12 *tion of such provision to any person or circumstances, is*
13 *held invalid, the remainder of this Act or the application*
14 *of such provision to persons or circumstances other than*
15 *those as to which it is held invalid, shall not be affected*
16 *thereby.*

17 *SHORT TITLE*

18 *SEC. 20. This Act may be cited as the "Atomic Energy*
19 *Act of 1946".*

79TH CONGRESS
2d Session

S. 1717

[Report No. 1211]

A BILL

For the development and control of atomic
energy.

By Mr. McMANON

DECEMBER 20 (legislative day, DECEMBER 19), 1945
Read twice and referred to the Special Committee on
Atomic Energy

APRIL 19 (legislative day, MARCH 5), 1946
Reported with an amendment

S. 1717

IN THE SENATE OF THE UNITED STATES

MAY 8 (legislative day, MARCH 5), 1946

Ordered to lie on the table and to be printed

AMENDMENTS

Intended to be proposed by Mr. McMAHON (in behalf of the Special Committee on Atomic Energy) to the bill (S. 1717) for the development and control of atomic energy, viz:

1 On page 37, after line 19, insert the following new sub-
2 section:

3 “(e) MANUFACTURE OF PRODUCTION FACILITIES.—

4 Unless authorized by a license issued by the Commission, no
5 person may manufacture, produce, transfer, or acquire any
6 facilities for the production of fissionable material. Licenses
7 shall be issued in accordance with such procedures as the
8 Commission may by regulation establish and shall be issued in
9 accordance with such standards and upon such conditions as
10 will restrict the production and distribution of such facilities

1 to effectuate the policies and purposes of this Act. Nothing
2 in this section shall be deemed to require a license for such
3 manufacture, production, transfer, or acquisition incident to or
4 for the conduct of research or development activities in the
5 United States of the types specified in section 3, or to prohibit
6 the Commission from manufacturing or producing such facil-
7 ities for its own use.”

8 On page 47, strike out lines 4 through 10, and in lieu
9 thereof insert the following:

10 “(b) PROHIBITION.—It shall be unlawful for any per-
11 son to manufacture, produce, transfer, or acquire any equip-
12 ment or device utilizing fissionable material or atomic energy
13 as a military weapon, except as may be authorized by the
14 Commission. Nothing in this subsection shall be deemed to
15 modify the provisions of section 4 of this Act, or to prohibit
16 research activities in respect of military weapons, or to per-
17 mit the export of any such equipment or device.”

18 On page 47, line 14, after the word “manufacture”
19 insert “, produce, or export”.

20 On page 47, line 19, after the word “manufacture”
21 insert “, production, export,”.

22 On page 48, line 13, after the word “manufacture”
23 insert “, production, export,”.

24 On page 48, line 15, after the word “manufacture”
25 insert “, production, export,”.

1 On page 48, line 23, after the word “manufacture”
2 insert “, production, export,”.

3 On page 56, lines 5 and 6, strike out “as the Com-
4 mission may determine” and in lieu thereof insert “as may
5 be necessary to effectuate the purposes of this Act”.

6 On page 66, after line 5, insert the following new
7 subsection:

8 “(c) ADVISORY COMMITTEES.—The members of the
9 General Advisory Committee established pursuant to section
10 2 (b) and the members of advisory boards established
11 pursuant to subsection (a) (1) of this section may serve
12 as such without regard to the provisions of sections 109
13 and 113 of the Criminal Code (18 U. S. C., secs. 198 and
14 203) or section 19 (e) of the Contract Settlement Act of
15 1944, except insofar as such sections may prohibit any such
16 member from receiving compensation in respect of any par-
17 ticular matter which directly involves the Commission or
18 in which the Commission is directly interested.

19 On page 69, line 13, after “4 (b),” insert “4 (e).”

20 On page 71, strike out lines 13 and 14, and in lieu
21 thereof insert the following:

22 “(a) The term ‘atomic energy’ shall be construed to
23 mean all forms of energy released in the course of or as
24 a result of nuclear fission or nuclear transformation.”

1 On page 72, after line 15, insert the following new para-
2 graphs:

3 “(f) The term ‘equipment or device utilizing fissionable
4 material or atomic energy’ shall be construed to mean any
5 equipment or device capable of making use of fissionable
6 material or peculiarly adapted for making use of atomic
7 energy and any important component part especially de-
8 signed for such equipment or devices, as determined by the
9 Commission.

10 “(g) The term ‘facilities for the production of fission-
11 able material’ shall be construed to mean any equipment or
12 device capable of such production and any important com-
13 ponent part especially designed for such equipment or de-
14 vices, as determined by the Commission.”

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AMENDMENTS

Intended to be proposed by Mr. McManon (in behalf of the Special Committee on Atomic Energy) to the bill (S. 1717) for the development and control of atomic energy.

MAY 8 (legislative day, MARCH 5), 1946

Ordered to lie on the table and to be printed

DIGEST OF

CONGRESSIONAL PROCEEDINGS

OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF BUDGET AND FINANCE
Legislative Reports and Service Section
(For Department staff only)

Issued June 3, 1946
For actions of May 31, June 1, 1946
79th-2nd, Nos. 103 and 104

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HIGHLIGHTS: Senate passed agricultural appropriation bill; agreed to amendment to exempt personnel increases needed for projects authorized by this bill from new pay law. Senate passed bill giving FWA additional powers over buildings and grounds and authorizing additional building construction. Senate passed atomic-energy bill. Sen. Johnston introduced and discussed bill to provide a secondary market for farm loans under GI Bill. Senate Congressional Reorganization Committee reported LaFollette bill with amendments. Sen. Byrd presented figures on employment and urged reductions in personnel. Rep. Lemke criticized collection by FCA of old feed and seed loans. Rep. Ellsworth inserted Food Study Committee's request to the Secretary to make public allocations on world-wide food distribution. Rep. Hull criticized this Department's and OPA's regulations as a cause of dairy-products situation in WIs.

SENATE - May 31

1. **LABOR-DISPUTES.** Passed with amendments H. R. 6578, the President's temporary labor bill (pp. 6114-84).
2. **CONGRESSIONAL REORGANIZATION.** The Special Committee on the Organization of Congress reported with amendments S. 2177, to provide for increased efficiency in the legislative branch (S. Rept. 1400)(p. 6105).
3. **PERSONNEL; ECONOMY.** The Joint Committee on Reduction of Nonessential Federal Expenditures submitted a report on Federal employment during March and April 1946, and Chairman Byrd spoke in favor of reduction in the number of employees (pp. 6105-8).
4. **WATER COMPACT.** Passed without amendment H. R. 4510, granting consent and approval of Congress to an interstate compact between Colorado and New Mexico regarding Costilla Creek waters (p. 6115). This bill will now be sent to the President.
5. **PRICE CONTROL.** Sen. Moore, Okla., criticized OPA's actions as they affect small cafes (p. 6110).
Sen. Capper, Kans., inserted a Beloit Teachers Association resolution commending the Government's anti-inflation efforts (p. 6105).
6. **APPROPRIATIONS CHAIRMAN.** Sen. McKellar, Tenn., was elected chairman of the Appropriations Committee (p. 6104).

7. SELECTIVE SERVICE. S. 2057, to continue the Selective Training and Service Act until May 15, 1947, was made the unfinished business (p. 6184).

SENATE - June 1

8. AGRICULTURAL APPROPRIATION BILL. Passed with amendments this bill, H. R. 5605 (pp. 6212-22). Agreed to these amendments, in addition to committee amendments:
By Sen. Russell, to finance school lunches from Sec. 32 (pp. 6218-9).
By Sen. Russell, to make the committee-amendment limitation on BAE work applicable to only that under "economic investigations" (p. 6213).
By Sen. Hayden, to provide that the BAI "animal husbandry" item shall include not over \$20,000 for construction of 3 or more buildings at the Southwest Poultry Experiment Station (p. 6213).
By Sen. Russell, to require that at least \$10,000 of the FS "forest products" item be spent for research on utilization of waste woods (p. 6216).
By Sen. Russell, to provide that Sec. 14 (a) of the Federal Employees' Pay Act of 1946 shall not apply to employment of personnel required to do the work authorized by those appropriations for which increased funds are provided in this bill (p. 6220).

Rejected an amendment by Sen. Myers, Pa., to increase BrISAE's "fruit, vegetable, and specialty crops" item by \$15,000 for mushroom work (pp. 6213-4). Sens. Russell and Barkley discussed a recommendation for inclusion of funds to investigate and develop foreign markets for agricultural products (pp. 6214-5). Sen. Murdock, Utah, inserted his statement urging an increase in the appropriation for reseeding forest lands (pp. 6215-6). Sen. Myers inserted his statement favoring funds for a research center in the Delaware River Basin (p. 6216). Sen. La Follette, Wis., inserted his statement favoring restoration of funds for forest recreation facilities (pp. 6216-7). Sens. Barkley and Russell discussed the forest-roads-and-trails item in connection with a letter from the Attorney General regarding title investigations, etc., and the \$15,000,000 provided for in the housing bill (pp. 6217-8). Sen. Butler, Nebr., inserted his statement favoring funds for SCS for earth-moving equipment (p. 6218). Sen. Maybank, S. C., inserted a statement by E. C. McArthur favoring SCS funds for purchase of equipment from surplus property (pp. 6221-2). Sens. Aiken and Russell discussed whether the \$2,500 rural-rehabilitation loan limit should be increased (p. 6219). Sen. Pepper, Fla., spoke against the labor-union rider (p. 6222). An amendment by Sen. Connally, Tex., to provide that not over \$75,000 of the BAI "inspection and quarantine" item shall be available for the establishment on Swan Island of an international quarantine station in cooperation with various organizations, was stricken on a point of order raised by Sen. Russell (pp. 6220-1).

Sens. Russell, Hayden, Tydings, Bankhead, Thomas of Okla., Gurney, Brooks, and Reed were appointed conferees on the bill (p. 6221).

9. ATOMIC ENERGY. Passed with amendments S. 1717, the atomic-energy bill (pp. 6190-212). For bill's provisions see Digest 75-6.
10. BUILDINGS AND GROUNDS. Passed as reported H. R. 5407, to grant FWA certain powers regarding site acquisition, building construction, purchase of buildings, etc. (p. 6225). Sens. Andrews, Fulbright, and Taft were appointed conferees on this bill (p. 6225).
11. RETIREMENT. Received the report of the Board of Actuaries of the Civil Service Retirement and Disability Funds (S. Doc. 197). To Civil Service Committee. (p. 6188.)
12. PRICE CONTROL. Sen. Willis, Ind., spoke in favor of his amendment to abolish OPA and transfer its food functions to USDA (pp. 6189-90).

secondary market where they can sell loans already made, in order to obtain funds with which to make additional loans. A readily available secondary market such as would be provided by the passage of this bill would enable the smaller lending institutions in the agricultural areas to serve the veterans in their own home community. This will further implement the GI bill of rights by permitting the veteran to do business with his own home-town banker whom he knows personally and by whom he is known.

Recently I made a similar recommendation to Mr. George E. Allen, one of the Directors of the Reconstruction Finance Corporation, suggesting therein that he provide a market for veterans' home loans which are guaranteed by the Veterans' Administration. He immediately devised an arrangement which was agreeable to Gen. Omar N. Bradley, Administrator of Veterans' Affairs, under which The RFC Mortgage Company, a wholly owned affiliate of the RFC, will provide the secondary market for these home loans which are guaranteed or insured under the Servicemen's Readjustment Act. No additional legislation was required for authorization of that program.

Those of us who have studied this present proposal, however, feel that transactions of this character for agricultural purposes should be made by some governmental farm lending agency. Thus, this bill, which I propose as a simple amendment to the Federal Farm Mortgage Corporation Act, would establish such a secondary market by authorizing the FPMC to purchase such loans from approved lenders.

The Federal Farm Mortgage Corporation appears to be the appropriate agency to provide this market for farm mortgages. The Corporation is wholly owned by the United States, and operates as part of the Farm Credit System. It is managed by a board of three directors, consisting of the Governor of the Farm Credit Administration, the Land Bank Commissioner, and the Secretary of the Treasury or an officer of the Treasury designated by him. The Corporation was created by the Federal Farm Mortgage Corporation Act, approved January 31, 1943 (12 U. S. C. 1020) to aid in stabilizing the Federal land bank system. The Corporation's existing functions are principally to provide funds for and service Land Bank Commissioner loans made under section 32 of the Emergency Farm Mortgage Act of 1933, as amended (12 U. S. C. 1016), and to provide a source of loan funds for the Federal land banks, when needed, through the purchase of farm loan bonds issued by the banks or loans to the banks.

The Corporation, in all probability, will not require any additional appropriations of Federal funds to enable it to purchase these GI-insured farm loans. The Corporation has available to it capital funds of \$200,000,000 and, with the approval of the Secretary of the Treasury, it may issue bonds guaranteed by the United States up to \$2,000,000,000 outstanding at any one time.

For the information of the Senate, I may say that at the present time they

are collecting on the loans, and have the money, and have no one to whom they may lend it. But if they are afforded this device they will be able to help out the GI's and at the same time help out themselves.

A secondary market for such loans appears to be needed to provide local lenders with the funds required to make farm loans to veterans. The Federal Farm Mortgage Corporation, by reason of its knowledge and experience in the farm-loan field, its place in the Farm Credit System, and the availability to it of adequate resources, appears to be the proper agency to provide this secondary market.

There being no objection, the bill (S. 2280) to amend the Federal Farm Mortgage Corporation Act to provide a secondary market for farm loans made under the Servicemen's Readjustment Act of 1944, as amended, and for other purposes, was received, read twice by its title, and referred to the Committee on Banking and Currency.

EXTENSION OF SELECTIVE TRAINING AND SERVICE ACT—AMENDMENTS

Mr. THOMAS of Utah (by request) submitted two amendments intended to be proposed to the bill (S. 2057) to extend the Selective Training and Service Act of 1940, as amended, until May 15, 1947, and for other purposes, which were ordered to lie on the table and to be printed.

AWARD OF MEDAL OF MERIT TO THOMAS E. WILSON

Mr. BROOKS. On Wednesday, May 22, Mr. Thomas E. Wilson, the head of Wilson Packing Co., of Chicago, was awarded the Medal of Merit by the Government of the United States for exceptionally meritorious conduct in the performance of outstanding services to the United States.

Thomas E. Wilson has contributed, I suppose, as much as any man in America to the development of the character and the ability of the young men and women on the farms of this country. He is known quite widely as the father of the 4-H Clubs.

When war came, out of his wealth of experience as a packer, he realized the necessity for saving fats. He organized civilian salvage of fats. Since Pearl Harbor, more than 500,000,000 pounds of fat have been salvaged, and the city of Chicago, in which he lives and where he was the head of this particular activity, has contributed by collecting more per capita than any other large city in America.

Mr. President, I ask that the citation accompanying the awarding of the medal be printed at this point in the RECORD as a part of my remarks.

There being no objection, the citation was ordered to be printed in the RECORD, as follows:

Thomas E. Wilson, for exceptionally meritorious conduct in the performance of outstanding services to the United States.

A few days after December 7, 1941, recognizing the critical shortage of fats vitally needed in the manufacture of medicine, munitions, soaps, and other items which would result in the loss of importation of vegetable fats from the Philippines and

Dutch East Indies, Mr. Wilson, with characteristic foresight and vigorous resourcefulness, conceived and, as Assistant Coordinator of Civilian Defense, pioneered in the organization of a fat-salvage program for the metropolitan area of the city of Chicago under which collections were commenced January 19, 1942. The success of the fat-salvage program in the Chicago area under Mr. Wilson's leadership demonstrated that such a program could be followed with success in metropolitan centers throughout the country, and the War Production Board, with the advice and assistance of Mr. Wilson, and with the approval of the Departments of Agriculture, War, and Navy, sponsored a national fat-salvage program which was begun in July 1942. With the cooperation of the American housewife, related industries, and the press and radio, many millions of pounds of vitally needed fats were collected. Under the Department of Agriculture the fat-salvage program is still being conducted to help meet the continued need of fats during the reconversion period. Mr. Wilson's selflessness, devotion to his country, and his energetic leadership in the fat-salvage program have immeasurably contributed to the welfare and the security of the United States during the period of emergency, and the habits of thrift thereby engendered will substantially contribute to the national economy for years to come.

THE LIFE STORY OF JOSEPH MEDILL PATTERSON

[Mr. BROOKS asked and obtained leave to have printed in the RECORD the life story of Capt. Joseph Medill Patterson, as printed in the Chicago Tribune, which appears in the Appendix.]

INDEPENDENT BUSINESSMEN LOOK AT COOPERATIVES—SPEECH BY GREY DRESIE

[Mr. CAPPER asked and obtained leave to have printed in the RECORD a speech entitled "The Independent Businessmen Look at Cooperatives," delivered by Grey Dresie, executive secretary, Kansas Independent Businessmen's Association, in answer to a radio address by Representative Voorhis of California, which appears in the Appendix.]

AGAINST THE WHOLE PEOPLE—EDITORIAL FROM THE OREGONIAN

[Mr. CORDON asked and obtained leave to have printed in the RECORD an editorial entitled "Against the Whole People" from the Oregonian, Portland, Oreg., of Wednesday, May 22, 1946, which appears in the Appendix.]

PROPOSED AMENDMENT OF PRICE CONTROL ACT

Mr. WILLIS. Mr. President, yesterday I sent to the desk an amendment to the bill proposing to amend the Price Control Act, and did not make any introductory remarks. I should like to take 2 or 3 minutes to explain what the proposed amendment provides for. I should also like to have unanimous consent to have the amendment printed in the RECORD at this point in my remarks.

The PRESIDENT pro tempore. Is there objection?

There being no objection, the amendment was ordered to be printed in the RECORD, as follows:

Amendment intended to be proposed by Mr. WILLIS to the bill (S. 2028) to amend the Emergency Price Control Act of 1942, as amended, and the Stabilization Act of 1942, as amended, and for other purposes, viz: At the proper place in the bill insert the following new section:

"SEC. —. (a) The Office of Price Administration and all of its functions, except

those transferred by this section, are hereby abolished.

"(b) All functions of the Office of Price Administration and the Price Administration relating to food commodities are hereby transferred to and shall be exercised by the Secretary of Agriculture.

"(c) All functions of the Office of Price Administration and the Price Administrator relating to rents and building materials are hereby transferred to and shall be exercised by the Civilian Production Administrator.

"(d) Such of the records, property (including office equipment) and unexpended balances of appropriations as have been used or available for use by the Office of Price Administration and the Price Administrator in the exercise of the functions transferred by this section and as may be determined and specified by the President shall be transferred to and available for use by the Secretary of Agriculture and the Civilian Production Administrator, respectively, in the exercise of the functions transferred to them by this section.

"(e) All regulations, policies, determinations, authorizations, requirements, designations, and other actions of the Price Administrator, made, prescribed, or performed in the exercise of the functions transferred by this section and before the transfer of such functions under this section shall, except to the extent rescinded, modified, superseded, or made inapplicable by the Secretary of Agriculture or the Civilian Production Administrator, have the same effect as if such transfer had not been made; but functions vested in the Price Administrator by any such regulation, policy, determination, authorization, requirement, designation, or other action shall, insofar as they are to be exercised after the transfer, be considered as vested in the Secretary of Agriculture or the Civilian Production Administrator, as the case may be."

Mr. WILLIS. Mr. President, the Office of Price Control appears to be in the hands of individuals who do not understand the fundamental principles of practical production and distribution of goods. Their policies are threatening a break-down of our American economy, and we will not have an adequate supply of needed goods under an administration like that which has been in force. Therefore, I have offered in the Senate to the bill proposing to amend the Price Control Act, an amendment which would, after July 1, 1946, place the control of food in the Department of Agriculture, and the control of rents and building materials in the Office of Civilian Production Administration. The Office of Price Control would be abolished on July 1, under the provisions of the amendment.

Mr. President, we will not have prosperity in this country until we establish freedom in production and distribution. The planned economy has been given too long a trial, and has proved to be an expensive failure. Let us get down to production quickly as an indispensable remedy for inflation.

Since February the OPA's principal effect in most areas has been to push 80 percent of the beef and lumber business into the black market, so the real price levels are not OPA prices at all, but the regularly quoted prevailing black-market prices. Business is done on that level. Beef is butchered behind the barn, under the oak tree, over the hill. The hides are buried. The valuable byproducts for vitamins and medicines and fertilizer are all wasted. For that waste the American public pays. A free mar-

ket would save them, and reduce the price of steaks. This is merely one evidence of the operation of the Office of Price Administration.

I further assert, Mr. President, that the Office of Price Administration is violating the law in its expenditure of huge sums of the taxpayers' money for carrying on false propaganda designed to set up Mr. Bowles as the indispensable man.

I ask unanimous consent to have printed in the RECORD a report upon the cost of food products which was published in the Washington Post.

There being no objection, the report was ordered to be printed in the RECORD, as follows:

A Washington housewife would pay today at least \$18 for the same bundle of groceries she could buy in 1939 for less than \$11, the Republican Congressional Food Study Committee reported yesterday.

If she shopped at a higher-priced, so-called class 1 store she would pay \$26.20 for the same groceries, the report said.

Representative JENKINS (Republican, Ohio), chairman of the study group, made the report public. He said the price survey was made to refute OPA claims that it had held the line on food prices during the war.

The comparative price figures represented the theoretical purchase of 73 food items. In April 1939 the total cost of the items based on chain-store price lists at the time was \$10.94.

Today the minimum purchase price for the same bundle would be \$18.06—or an increase of more than 60 percent, the report said.

This percentage increase was higher than indicated by Bureau of Labor Statistics figures. A spokesman said the Bureau of Labor Statistics food index, based on 61 market items, showed a 51-percent increase from August 1939 to April 1946 in Washington. He said their figures did not compare April 1939 with April this year, but that the August 1939 prices were somewhat lower than those of April 1939.

JENKINS' study emphasized that the 73-item total of \$18.06 was the lowest price for the least expensive brand of each food item found in Washington chain markets. Many of the prices are below OPA ceilings.

Far higher legal prices for the same commodities are charged in individual or class 1 stores. At actual selling prices in these stores, the 73 items now cost the housewife a minimum of \$26.20—an increase of approximately 140 percent over 1939.

In 1939 Washington stores were running full-page ads begging housewives to buy butter at 23 cents a pound, sliced bacon at 24 cents a pound, sugar-cured ham at 23 cents a pound, and big red winesap apples at 6 cents a pound.

The survey showed the price on these items has nearly doubled under OPA and they are now practically unobtainable at any price. Bureau of Labor Statistics average-price figures in Washington for 1939 showed butter then selling at 31 cents, bacon 32 cents, and sliced ham, 50 cents.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. BARKLEY. Mr. President, I ask unanimous consent that the unfinished business be temporarily laid aside, without prejudice, and that the Senate proceed to the consideration of Calendar No. 1251, Senate bill 1717, a bill for the development and control of atomic energy.

The PRESIDENT pro tempore. The clerk will state the bill by title.

The CHIEF CLERK. A bill (S. 1717) for the development and control of atomic energy.

The PRESIDENT pro tempore. Is there objection to the request of the Senator from Kentucky?

Mr. GURNEY. Mr. President, I should like to ask the majority leader if it is completely understood that the selective-service bill, Senate bill 2057, is laid aside only temporarily for this afternoon.

The PRESIDENT pro tempore. That is the request.

Mr. BARKLEY. That is the fact. I will say to the Senate that we hope to dispose of the atomic-energy bill and also the agricultural appropriation bill today, and then recess until Monday at which time the consideration of the selective-service bill will be resumed.

Mr. GURNEY. I thank the Senator. The PRESIDENT pro tempore. Is there objection to the request of the Senator from Kentucky?

There being no objection, the Senate proceeded to consider the bill (S. 1717) for the development and control of atomic energy, which had been reported from the Special Committee on Atomic Energy, with an amendment, to strike out all after the enacting clause and to insert:

DECLARATION OF POLICY

SECTION 1. (a) Findings and declaration: Research and experimentation in the field of nuclear chain reaction have attained the stage at which the release of atomic energy on a large scale is practical. The significance of the atomic bomb for military purposes is evident. The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved. Therefore any legislation will necessarily be subject to revision from time to time. It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life. Accordingly it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

(b) Purpose of act: It is the purpose of this act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the field; and

(5) A program of administration which will be consistent with the foregoing policies and with international arrangements made by the United States, and which will enable the Congress to be currently informed so as

to take further legislative action as may hereafter be appropriate.

ORGANIZATION

SEC. 2. (a) Atomic Energy Commission:

(1) There is hereby established an Atomic Energy Commission (herein called the Commission), which shall be composed of five members. Three members shall constitute a quorum of the Commission. The President shall designate one member as Chairman of the Commission.

(2) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate. In submitting any nomination to the Senate, the President shall set forth the experience and the qualifications of the nominee. The term of office of each member of the Commission taking office prior to the expiration of 2 years after the date of enactment of this act shall expire upon the expiration of such 2 years. The term of office of each member of the Commission taking office after the expiration of 2 years from the date of enactment of this act shall be 5 years, except that (A) the term of office of the members first taking office after the expiration of 2 years from the date of enactment of this act shall expire, as designated by the President at the time of appointment, one at the end of 3 years, one at the end of 4 years, one at the end of 5 years, one at the end of 6 years, and one at the end of 7 years, after the date of enactment of this act; and (B) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term. Any member of the Commission may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. Each member, except the Chairman, shall receive compensation at the rate of \$15,000 per annum; and the Chairman shall receive compensation at the rate of \$17,500 per annum. No member of the Commission shall engage in any other business, vocation, or employment than that of serving as a member of the Commission.

(3) The principal office of the Commission shall be in the District of Columbia, but the Commission or any duly authorized representative may exercise any or all of its powers in any place. The Commission shall hold such meetings, conduct such hearings, and receive such reports as may be necessary to enable it to carry out the provisions of this act.

(4) There are hereby established within the Commission—

(A) a General Manager, who shall discharge such of the administrative and executive functions of the Commission as the Commission may direct. The General Manager shall be appointed by the President by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$15,000 per annum. The Commission may make recommendations to the President with respect to the appointment or removal of the General Manager.

(B) a Division of Research, a Division of Production, a Division of Engineering, and a Division of Military Application. Each division shall be under the direction of a Director who shall be appointed by the Commission, and shall receive compensation at the rate of \$14,000 per annum. The Commission shall require each such division to exercise such of the Commission's powers under this act as the Commission may determine, except that the authority granted under section 3 (a) of this act shall not be exercised by the Division of Research.

(b) General Advisory Committee: There shall be a General Advisory Committee to advise the Commission on scientific and technical matters relating to materials, production, and research and development, to be composed of nine members, who shall be appointed from civilian life by the President.

Each member shall hold office for a term of 6 years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term; and (2) the terms of office of the members first taking office after the date of the enactment of this act shall expire, as designated by the President at the time of appointment, three at the end of 2 years, three at the end of 4 years, and three at the end of 6 years, after the date of the enactment of this act. The Committee shall designate one of its own members as Chairman. The Committee shall meet at least four times in every calendar year. The members of the Committee shall receive a per diem compensation of \$50 for each day spent in meetings or conferences, and all members shall receive their necessary traveling or other expenses while engaged in the work of the Committee.

(c) Military Liaison Committee: There shall be a Military Liaison Committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine. The Commission shall advise and consult with the Committee on all atomic energy matters which the Committee deems to relate to military applications, including the development, manufacture, use, and storage of bombs, the allocation of fissionable material for military research, and the control of information relating to the manufacture or utilization of atomic weapons. The Commission shall keep the Committee fully informed of all such matters before it and the Committee shall keep the Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the Committee at any time concludes that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the Department of War or Navy, derived from the Constitution, laws, and treaties, the Committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy. If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

RESEARCH

SEC. 3. (a) Research assistance: The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development activities in the fields specified below by private or public institutions or persons and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields. To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, grants-in-aid, and loans) for the conduct of research and development activities relating to—

- (1) nuclear processes;
- (2) the theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) utilization of fissionable and radioactive materials for medical, biological, health, or military purposes;
- (4) utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and
- (5) the protection of health during research and production activities.

The Commission may make such arrangements without regard to the provisions of section 3709 of the Revised Statutes (U. S. C.,

title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and may make partial and advance payments under such arrangements, and may make available for use in connection therewith such of its equipment and facilities as it may deem desirable. Such arrangements shall contain such provisions to protect health, to minimize danger from explosion and other hazards to life or property, and to require the reporting and to permit the inspection of work performed thereunder, as the Commission may determine; but shall not contain any provisions or conditions which prevent the dissemination of scientific or technical information, except to the extent such dissemination is prohibited by law.

(b) Research by the Commission: The Commission is authorized and directed to conduct, through its own facilities, activities and studies of the types specified in subsection (a) above.

PRODUCTION OF FISSIONABLE MATERIAL

SEC. 4. (a) Definition: As used in this act, the term "produce," when used in relation to fissionable material, means to manufacture, produce, or refine fissionable material, as distinguished from source materials as defined in section 5 (b) (1), or to separate fissionable material from other substances in which such material may be contained or to produce new fissionable material.

(b) Prohibition: It shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

(c) Ownership and operation of production facilities:

(1) Ownership of production facilities: The Commission shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (A) are useful in the conduct of research and development activities in the fields specified in section 3, and (B) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

(2) Operation of the Commission's production facilities: The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common de-

fense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) Operation of other production facilities: Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) Irradiation of materials: For the purpose of increasing the supply of radioactive materials, the Commission is authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

CONTROL OF MATERIALS

SEC. 5. (a) Fissionable materials:

(1) Definition: As used in this act, the term "fissionable material" means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material, or any material artificially enriched by any of the foregoing; but does not include source materials, as defined in section 5 (b) (1).

(2) Government ownership of all fissionable material: All right, title, and interest within or under the jurisdiction of the United States, in or to any fissionable material, now or hereafter produced, shall be the property of the Commission, and shall be deemed to be vested in the Commission by virtue of this act. Any person owning any interest in any fissionable material at the time of the enactment of this act, or owning any interest in any material at the time when such material is hereafter determined to be a fissionable material, or who lawfully produces any fissionable material incident to privately financed research or development activities, shall be paid just compensation therefor. The Commission may, by action consistent with the provisions of paragraph (4) below, authorize any such person to retain possession of such fissionable material, but no person shall have any title in or to any fissionable material.

(3) Prohibition: It shall be unlawful for any person, after 60 days from the effective date of this act to (A) possess or transfer any fissionable material, except as authorized by the Commission, or (B) export from or import into the United States any fissionable material, or (C) directly or indirectly engage in the production of any fissionable material outside of the United States.

(4) Distribution of fissionable material: Without prejudice to its continued ownership thereof, the Commission is authorized to distribute fissionable material, with or without charge, to applicants requesting such material (A) for the conduct of research or development activities either independently or under contract or other arrangement with the Commission, (B) for use in medical therapy, or (C) for use pursuant to a license issued under the authority of section 7. Such material shall be distributed in such quantities and on such terms that no applicant will be enabled to obtain an amount sufficient to construct a bomb or other military weapon. The Commission is directed to distribute sufficient fissionable material to permit the conduct of widespread independent research and development activity, to the maximum extent practicable. In determining the quantities of fissionable material to be distributed, the Commission shall make such provisions for its own needs and for the conservation of fissionable material as it may determine to be necessary in the national interest for the future development of atomic energy. The Commission shall not distribute any material to any applicant, and shall recall any distributed material from any ap-

plicant, who is not equipped to observe or who fails to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as may be established by the Commission, or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(5) The Commission is authorized to purchase or otherwise acquire any fissionable material or any interest therein outside the United States, or any interest in facilities for the production of fissionable material, or in real property on which such facilities are located, without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under contracts for such purposes. The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

(b) Source materials:

(1) Definition: As used in this act, the term "source material" means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

(2) License for transfers required: Unless authorized by a license issued by the Commission, no person may transfer or deliver and no person may receive possession of or title to any source material after removal from its place of deposit in nature, except that licenses shall not be required for quantities of source materials which, in the opinion of the Commission, are unimportant.

(3) Issuance of licenses: The Commission shall establish such standards for the issuance, refusal, or revocation of licenses as it may deem necessary to assure adequate source materials for production, research, or development activities pursuant to this act or to prevent the use of such materials in a manner inconsistent with the national welfare. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish.

(4) Reporting: The Commission is authorized to issue such regulations or orders requiring reports of ownership, possession, extraction, refining, shipment, or other handling of source materials as it may deem necessary, except that such reports shall not be required with respect to (A) any source material prior to removal from its place of deposit in nature, or (B) quantities of source materials which in the opinion of the Commission are unimportant or the reporting of which will discourage independent prospecting for new deposits.

(5) Acquisition: The Commission is authorized and directed to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this act. Any purchase made under this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made thereunder. The Commission may establish guaranteed prices for all source materials delivered to it within a specified time. Just compensa-

tion shall be made for any property taken, requisitioned, or condemned under this paragraph.

(6) Exploration: The Commission is authorized to conduct and enter into contracts for the conduct of exploratory operations, investigations, and inspections to determine the location, extent, mode of occurrence, use, or conditions of deposits or supplies of source materials, making just compensation for any damage or injury occasioned thereby. Such exploratory operations may be conducted only with the consent of the owner, but such investigations and inspections may be conducted with or without such consent.

(7) Public lands: All uranium, thorium, and all other materials determined pursuant to paragraph (1) of this subsection to be peculiarly essential to the production of fissionable material, contained, in whatever concentration, in deposits in the public lands are hereby reserved for the use of the United States; except that with respect to any location, entry, or settlement made prior to the date of enactment of this act no reservation shall be deemed to have been made, if such reservation would deprive any person of any existing or inchoate rights or privileges to which he would otherwise be entitled or would otherwise enjoy. The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources, under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby. Any lands so patented, conveyed, leased, or otherwise disposed of may be used, and any rights under any such permit or authorization may be exercised, as if no reservation of such materials had been made under this subsection; except that, when such use results in the extraction of any such material from the land in quantities which may not be transferred or delivered without a license under this subsection, such material shall be the property of the Commission and the Commission may require delivery of such material to it by any possessor thereof after such material has been separated as such from the ores in which it was contained. If the Commission requires the delivery of such material to it, it shall pay to the person mining or extracting the same, or to such other person as the Commission determines to be entitled thereto, such sums, including profits, as the Commission deems fair and reasonable for the discovery, mining, development, production, extraction, and other services performed with respect to such material prior to such delivery, but such payment shall not include any amount on account of the value of such material before removal from its place of deposit in nature. If the Commission does not require delivery of such material to it, the reservation made pursuant to this paragraph shall be of no further force or effect.

(c) Byproduct materials:

(1) Definition: As used in this act, the term "byproduct material" means any radioactive material (except fissionable material) yielded in or made radioactive by exposure to the radiation incident to the processes of producing or utilizing fissionable material.

(2) Distribution: The Commission is authorized to distribute, with or without charge, byproduct materials to applicants seeking such materials for research or development activity, medical therapy, industrial uses, or such other useful applications as may be developed. In distributing such materials, the Commission shall give preference to applicants proposing to use such

materials in the conduct of research and development activity or medical therapy. The Commission shall not distribute any byproduct materials to any applicant, and shall recall any distributed materials from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such materials in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(d) General provisions:

(1) The Commission shall not distribute any fissionable or source material to any person for a use which is not under or within the jurisdiction of the United States or to any foreign government.

(2) The Commission shall establish by regulation a procedure by which any person who is dissatisfied with the distribution or refusal to distribute to him, or the recall from him, of any fissionable or byproduct materials or with the issuance, refusal, or revocation of a license to him for the transfer or receipt of source materials may obtain a review of such determination by a board of appeal consisting of three members appointed by the Commission. The Commission may in its discretion review and revise any decision of such board of appeal.

MILITARY APPLICATIONS OF ATOMIC ENERGY

SEC. 6. (a) Authority: The Commission is authorized to—

(1) conduct experiments and do research and development work in the military application of atomic energy; and

(2) engage in the production of atomic bombs, atomic-bomb parts, or other military weapons utilizing fissionable materials; except that such activities shall be carried on only to the extent that the express consent and direction of the President of the United States has been obtained, which consent and direction shall be obtained at least once each year.

The President from time to time may direct the Commission to deliver such quantities of weapons to the armed forces for such use as he deems necessary in the interest of national defense.

(b) Prohibition: It shall be unlawful for any person to manufacture or produce any device or equipment designed to utilize fissionable material as a military weapon except as may be (1) incident to research and development activities or (2) authorized by the Commission. Nothing in this subsection shall be deemed to modify the provisions of section 4 of this act.

UTILIZATION OF ATOMIC ENERGY

SEC. 7. (a) License required: It shall be unlawful, except as provided in sections 5 (a) (4) (A) or (B) or 6 (a), for any person to manufacture any equipment or device utilizing fissionable material or atomic energy or to utilize fissionable material or atomic energy with or without such equipment or device, except under and in accordance with a license issued by the Commission authorizing such manufacture or utilization. No license may permit any such activity if fissionable material is produced incident to such activity, except as provided in sections 3 and 4. Nothing in this section shall be deemed to require a license for the conduct of research or development activities relating to the manufacture of such equipment or devices or the utilization of fissionable material or atomic energy, or for the manufacture or use of equipment or devices for medical therapy.

(b) Report to Congress: Whenever in its opinion any industrial, commercial, or other nonmilitary use of fissionable material or atomic energy has been sufficiently developed to be of practical value, the Commission shall prepare a report to the President stating all the facts with respect to such use, the Commission's estimate of the social, political,

economic, and international effects of such use and the Commission's recommendations for necessary or desirable supplemental legislation. The President shall then transmit this report to the Congress together with his recommendations. No license for any manufacture or use shall be issued by the Commission under this section until after (1) a report with respect to such manufacture or use has been filed with the Congress; and (2) a period of 90 days in which the Congress was in session has elapsed after the report has been so filed. In computing such period of 90 days, there shall be excluded the days on which either House is not in session because of an adjournment of more than 3 days.

(c) Issuance of licenses: After such 90-day period, unless hereafter prohibited by law, the Commission may license such manufacture or use in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this act. The Commission is authorized and directed to issue licenses on a nonexclusive basis and to supply to the extent available appropriate quantities of fissionable material to licensees (1) whose proposed activities will serve some useful purpose proportionate to the quantities of fissionable material to be consumed; (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish; and (3) who agree to make available to the Commission such technical information and data concerning their activities pursuant to such licenses as the Commission may determine necessary to encourage similar activities by as many licensees as possible. Each such license shall be issued for a specified period, not to exceed 1 year, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon the expiration of such period. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results. No license may be given to any person for activities which are not under or within the jurisdiction of the United States or to any foreign government.

(d) Byproduct power: If energy which may be utilized is produced in the production of fissionable material, such energy may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities under contracts providing for reasonable resale prices.

INTERNATIONAL ARRANGEMENTS

SEC. 8. (a) Definition: As used in this act, the term "international arrangement" shall mean any treaty approved by the Senate or international agreement approved by the Congress, during the time such treaty or agreement is in full force and effect.

(b) Effect of international arrangements: Any provision of this act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this act shall be deemed to be of no further force or effect.

(c) Policies contained in international arrangements: In the performance of its functions under this act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

PROPERTY OF THE COMMISSION

SEC. 9. (a) The President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in the following property:

(1) All fissionable material; all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable material or atomic energy; all processes and technical information of any kind, and the source thereof (including data, drawings, specifications, patents, patent applications, and other sources) relating to the processing, production, or utilization of fissionable material or atomic energy; and all contracts, agreements, leases, patents, applications for patents, inventions and discoveries (whether patented or unpatented), and other rights of any kind concerning any such items;

(2) All facilities, equipment, and materials, devoted primarily to atomic energy research and development; and

(3) Such other property owned by or in the custody or control of the Manhattan Engineer District or other Government agencies as the President may determine.

(b) In order to render financial assistance to those States and localities in which the activities of the Commission are carried on and in which the Commission has acquired property previously subject to State and local taxation, the Commission is authorized to make payments to State and local governments in lieu of property taxes. Such payments may be in the amounts, at the times, and upon the terms the Commission deems appropriate, but the Commission shall be guided by the policy of not making payments in excess of the taxes which would have been payable for such property in the condition in which it was acquired, except in cases where special burdens have been cast upon the State or local government by activities of the Commission, the Manhattan Engineer District, or their agents. In any such case, any benefit accruing to the State or local government by reason of such activities shall be considered in determining the amount of the payment. The Commission, and the property, activities, and income of the Commission, are hereby expressly exempted from taxation in any manner or form by any State, county, municipality, or any subdivision thereof.

CONTROL OF INFORMATION

SEC. 10. (a) Policy: It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy, the Commission shall be guided by the following principles:

(1) That information with respect to the use of atomic energy for industrial purposes should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established; and

(2) That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.

(b) Dissemination: The Commission is authorized and directed to establish such information services, publications, libraries, and other registers of available information as it may deem necessary or desirable to provide for the dissemination of information in accordance with subsection (a).

(c) Restrictions:

(1) The term "restricted data" as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to

time determines may be published without adversely affecting the common defense and security.

(2) Whoever, lawfully or unlawfully, having possession of, access to, control over, or being entrusted with, any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data—

(A) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with intent to injure the United States or with intent to secure an advantage to any foreign nation, upon conviction thereof, shall be punished by a fine of not more than \$20,000 or imprisonment for not more than 20 years, or both;

(B) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with reason to believe such data will be utilized to injure the United States or to secure an advantage to any foreign nation, shall, upon conviction, be punished by a fine of not more than \$10,000 or imprisonment for not more than 10 years, or both.

(3) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, acquires or attempts or conspires to acquire any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or imprisonment for not more than 20 years, or both.

(4) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, removes, conceals, tampers with, alters, mutilates, or destroys any document, writing, sketch, photograph, plan, model, instrument, appliance, or note involving or incorporating restricted data and used by any individual or person in connection with the production of fissionable material, or research or development relating to atomic energy, conducted by the United States, or financed in whole or in part by Federal funds, or conducted with the aid of fissionable material, shall be punished by a fine of not more than \$20,000 or imprisonment for not more than 20 years or both.

(5) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised and consulted with the Commission with respect to such prosecution.

(6) This section shall not exclude the applicable provisions of any other laws, except that no Government agency shall take any action under such other laws inconsistent with the provisions of this section.

(d) Inspections, records, and reports: The Commission is—

(1) Authorized by regulation or order to require such reports and the keeping of such records with respect to, and to provide for such inspections of, activities and studies of types specified in section 3 and of activities under licenses issued pursuant to section 7 as the Commission may determine;

(2) Authorized and directed by regulation or order to require regular reports and records with respect to, and to provide for frequent inspections of, the production of fissionable material in the conduct of research and development activities.

PATENTS AND INVENTIONS

SEC. 11. (a) Production and military utilization:

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any patent granted for any such invention or discovery is hereby revoked, and just compensation shall be made therefor.

(2) No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(3) Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon shall file with the Commission a report containing a complete description thereof, unless such invention or discovery is described in an application for a patent filed in the Patent Office by such person within the time required for the filing of such report. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (A) The sixtieth day after the date of enactment of this act; (B) the sixtieth day after the completion of such invention or discovery; or (C) the sixtieth day after such person first discovers or first has reason to believe that such invention or discovery is useful in such production or utilization.

(b) Use of inventions for research: No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(c) Nonmilitary utilization:

(1) It shall be the duty of the Commission to declare any patent to be affected with the public interest if (A) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy; and (B) the licensing of such invention or discovery under this subsection is necessary to effectuate the policies and purposes of this act.

(2) Whenever any patent has been declared, pursuant to paragraph (1), to be affected with the public interest—

(A) The Commission is hereby licensed to use the invention or discovery covered by such patent in performing any of its powers under this act; and

(B) Any person to whom a license has been issued under section 7 is hereby licensed to use the invention or discovery covered by such patent to the extent such invention or discovery is used by him in carrying on the activities authorized by his license under section 7.

The owner of the patent shall be entitled to a reasonable royalty fee for any use of an invention or discovery licensed by this subsection. Such royalty fee may be agreed upon by such owner and the licensee, or in the absence of such agreement shall be determined by the Commission.

(3) No court shall have jurisdiction or power to stay, restrain, or otherwise enjoin the use of any invention or discovery by a licensee, to the extent that such use is licensed by paragraph (2) above, on the ground of infringement of any patent. If in any action for infringement against such licensee the court shall determine that the defendant is exercising such license, the measure of damages shall be the royalty fee determined pursuant to this section, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court. If no royalty fee has been determined, the court shall stay the proceeding

until the royalty fee is determined pursuant to this section. If any such licensee shall fail to pay such royalty fee, the patentee may bring an action in any court of competent jurisdiction for such royalty fee, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court.

(d) Acquisition of patents: The Commission is authorized to purchase, or to take, requisition, or condemn, and make just compensation for, (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or patent application covering any such invention or discovery. The Commissioner of Patents shall notify the Commission of all applications for patents heretofore or hereafter filed which in his opinion disclose such inventions or discoveries and shall provide the Commission access to all such applications.

(e) Compensation awards and royalties:

(1) Patent Compensation Board: The Commission shall designate a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications under this subsection.

(2) Eligibility:

(A) Any owner of a patent licensed under subsection (c) (2) or any licensee thereunder may make application to the Commission for the determination of a reasonable royalty fee in accordance with such procedures as it by regulation may establish.

(B) Any person seeking to obtain the just compensation provided in subsections (a), (b), or (d) shall make application therefor to the Commission in accordance with such procedures as it may by regulation establish.

(C) Any person making any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon who is not entitled to compensation therefor under subsection (a) and who has complied with subsection (a) (3) above may make application to the Commission for, and the Commission may grant, an award.

(D) Any person making application under this subsection shall have the right to be represented by counsel.

(3) Standards:

(A) In determining such reasonable royalty fee, the Commission shall take into consideration any defense, general or special, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, such patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and may consider the cost to the owner of the patent of developing such invention or discovery or acquiring such patent.

(B) In determining what constitutes just compensation under subsection (a), (b), or (d) above, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery, and may determine that such compensation be paid in periodic payments or in a lump sum.

(C) In determining the amount of any award under paragraph (2) (C) of this subsection, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery. Awards so made may be paid by the Commission in periodic payments or in a lump sum.

(4) Judicial review: Any person aggrieved by any determination of the Commission of an award or of a reasonable royalty fee may obtain a review of such determination in the Court of Appeals for the District of Columbia by filing in such court, within 30 days after notice of such determination, a

written petition praying that such determination be set aside. A copy of such petition shall be forthwith served upon the Commission and thereupon the Commission shall file with the court a certified transcript of the entire record in the proceeding, including the findings and conclusions upon which the determination was based. Upon the filing of such transcript the court shall have exclusive jurisdiction upon the record certified to it to affirm the determination in its entirety or set it aside and remand it to the Commission for further proceedings. The findings of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. The court's judgment shall be final, subject, however, to review by the Supreme Court of the United States upon writ of certiorari on petition therefor under section 240 of the Judicial Code (U. S. C., title 28, sec. 347), by the Commission or any party to the court proceeding.

GENERAL AUTHORITY

SEC. 12. (a) In the performance of its functions the Commission is authorized to—

(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and by-product materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this act, or in the administration or enforcement of this act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony Act of February 11, 1893 (U. S. C., title 49, sec. 46), shall apply with respect to any individual who specifically claims such privilege. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) appoint and fix the compensation of such officers and employees as may be necessary to carry out the functions of the Commission. Such officers and employees shall be appointed in accordance with the civil-service laws and their compensation fixed in accordance with the Classification Act of 1923, as amended, except that to the extent the Commission deems such action necessary to the discharge of its responsibilities, personnel may be employed and their compensation fixed without regard to such laws. Attorneys appointed under this paragraph may appear for and represent the Commission in any case in any court. The Commission shall make adequate provision for administrative review of any determination to dismiss any employee;

(5) acquire such materials, property, equipment, and facilities, establish or construct such buildings and facilities, and modify such buildings and facilities from time to time as it may deem necessary, and construct, acquire, provide, or arrange for such facilities and services (at project sites where such facilities and services are not available) for the housing, health, safety, welfare, and recreation of personnel employed by the Commission as it may deem necessary;

(6) with the consent of the agency concerned, utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this act;

(8) contract for the expenditure of funds for the purposes specified in section 10 (b) without regard to the provisions of section 87 of the act of January 12, 1895 (28 Stat. 622), and section 11 of the act of March 1, 1919 (40 Stat. 1270; U. S. C., title 44, sec. 111); and

(9) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) Security: The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

SEC. 13. (a) The United States shall make just compensation for any property or interests therein taken or requisitioned pursuant to sections 5 and 11. The Commission shall determine such compensation. If the compensation so determined is unsatisfactory to the person entitled thereto, such person shall be paid 50 percent of the amount so determined, and shall be entitled to sue the United States in the Court of Claims or in any district court of the United States in the manner provided by sections 24 (20) and 145 of the Judicial Code to recover such further sum as added to said 50 percent will make up such amount as will be just compensation.

(b) In the exercise of the right of eminent domain and condemnation, proceedings may be instituted under the act of August 1, 1888 (U. S. C., title 40, sec. 257), or any other applicable Federal statute. Upon or after the filing of the condemnation petition, immediate possession may be taken and the property may be occupied, used, and improved for the purposes of this act, notwithstanding any other law. Real property acquired by purchase, donation, or other means of transfer may also be occupied, used, and improved for the purposes of this act, prior to approval of title by the Attorney General.

JOINT COMMITTEE ON ATOMIC ENERGY

SEC. 14. (a) There is hereby established a Joint Committee on Atomic Energy to be composed of nine Members of the Senate to be appointed by the President of the Senate, and nine Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. In each instance not more than five members shall be members of the same political party.

(b) The joint committee shall make continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. The Commission shall keep the joint committee fully and currently informed with respect to the Commission's activities. All bills, resolutions, and other matters in the Senate or the House of Representatives relating primarily to the Commission or to the development, use, or control of atomic energy shall be referred to the joint committee. The members of the joint committee who are Members of the

Senate shall from time to time report to the Senate, and the members of the joint committee who are Members of the House of Representatives shall from time to time report to the House, by bill or otherwise, their recommendations with respect to matters within the jurisdiction of their respective Houses which are (1) referred to the joint committee or (2) otherwise within the jurisdiction of the joint committee.

(c) Vacancies in the membership of the joint committee shall not affect the power of the remaining members to execute the functions of the joint committee, and shall be filled in the same manner as in the case of the original selection. The joint committee shall select a chairman and a vice chairman from among its members.

(d) The joint committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such places and times, to require, by subpoena or otherwise, the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words. The provisions of sections 102 to 104, inclusive, of the Revised Statutes shall apply in case of any failure of any witness to comply with a subpoena or to testify when summoned under authority of this section.

(e) The joint committee is empowered to appoint and fix the compensation of such experts, consultants, technicians, and clerical and stenographic assistants as it deems necessary and advisable, but the compensation so fixed shall not exceed the compensation prescribed under the Classification Act of 1923, as amended, for comparable duties. The committee is authorized to utilize the services, information, facilities, and personnel of the departments and establishments of the Government.

ENFORCEMENT

SEC. 15. (a) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of sections 4 (b), 5 (a) (3), or 6 (b) shall, upon conviction thereof, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 5 years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than 20 years, or both.

(b) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this act other than those specified in subsection (a) and other than section 10 (c), or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (d), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than 2 years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than 20 years, or both.

(c) Whenever in the judgment of the Commission any person has engaged or is about to engage in any acts or practices which constitute or will constitute a violation of any provision of this act, or any regulation or order issued thereunder, it may make application to the appropriate court for an order enjoining such acts or practices, or for an order enforcing compliance with such provision, and upon a showing by the Commission that such person has engaged or is about to engage in any such acts or practices a per-

manent or temporary injunction, restraining order, or other order shall be granted without bond.

(d) In case of failure or refusal to obey a subpoena served upon any person pursuant to section 12 (a) (3), the district court for any district in which such person is found or resides or transacts business, upon application by the Commission, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, or both, in accordance with the subpoena; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

REPORTS

SEC. 16. The Commission shall submit to the Congress, in January and July of each year, a report concerning the activities of the Commission. The Commission shall include in such report, and shall at such other times as it deems desirable submit to the Congress, such recommendations for additional legislation as the Commission deems necessary or desirable.

DEFINITIONS

SEC. 17. As used in this act—

(a) The term "atomic energy" shall include all forms of energy liberated in the transmutation of atomic species.

(b) The term "Government agency" means any executive department, commission, independent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other establishment, in the executive branch of the Government.

(c) The term "person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent, or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions.

(d) The term "United States", when used in a geographical sense, includes all Territories and possessions of the United States.

(e) The term "research and development" means theoretical analysis, exploration, and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

APPROPRIATIONS

SEC. 18. (a) There are hereby authorized to be appropriated such sums as may be necessary and appropriate to carry out the provisions and purposes of this act. The acts appropriating such sums may appropriate specified portions thereof to be accounted for upon the certification of the Commission only. Funds appropriated to the Commission shall, if obligated by contract during the fiscal year for which appropriated, remain available for expenditure for 4 years following the expiration of the fiscal year for which appropriated. After such 4-year period, the unexpended balances of appropriations shall be carried to the surplus fund and covered into the Treasury.

(b) Such part as the President may determine of the unexpended balances of appropriations, allocations, or other funds available for expenditure in connection with the Manhattan Engineer District are hereby transferred to the Commission and shall be available for expenditure for the purpose of carrying out the provisions of this act.

SEPARABILITY OF PROVISIONS

SEC. 19. If any provisions of this act, or the application of such provision to any person or circumstances, is held invalid, the remainder of this act or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SHORT TITLE

SEC. 20. This act may be cited as the "Atomic Energy Act of 1946."

Mr. McMAHON. Mr. President, I rise to propose to the Senate that it adopt Senate bill 1717, as amended and reported by the Special Committee on Atomic Energy. The bill provides for the development and control of atomic energy. Your committee, constituted at the end of last October, has engaged in more than 5 months of continuous study of a problem which challenged the complete attention, the intelligence, and the earnestness of the committee members. I wish to pay tribute to the members of the committee who worked morning and afternoon on this subject, which was entirely new to them when they commenced, as it was to me, and who pored over every detail of the bill. I am happy to tell the Senate that after this 5 months of work, in which there was not even for 1 moment a scintilla of partisanship, the committee has agreed on every word, and every line and every clause of the bill.

I have said, Mr. President, that it is a challenging subject. It is complicated. Atomic energy can make or destroy America. So, I should like to speak for a few moments about the result of the committee's endeavors and about the bill as it finally shapes up before us.

It was soon concluded that there could be no private production of fissionable material within the boundaries of the United States. It was concluded that national safety and national welfare demanded that all facilities producing fissionable material, of which atomic bombs are composed, should be under the sole management and control of the Government. We also concluded that it was necessary at this time to impose certain security restraints in regard to this subject.

Those security restraints will be found written into the bill. This was one of the most difficult subjects with which we had to deal, because we realized that if we were to progress, as we must progress in this science, the maximum amount of freedom had to be allowed to scientists. At the same time, it was appreciated that during the pending state of the world's affairs it was absolutely necessary that we impose some restrictive clauses. We discovered that the espionage act as it was written would not do, so S. 1717 was written so as to strengthen the provisions of the Espionage Act and thus cover the subject.

I should like to take a few moments to refer to the patent features of the bill. Obviously if all production of fissionable material is to be under Government control and management there is no field for private patents on the production of such material. However, the bill provides that any one who makes such an invention shall be properly compensated.

It is provided that there shall be no patents on the invention of atomic weapons. Obviously, this is a wise provision of the bill; but compensation is provided for the discovery.

Mr. President, what is the treatment that we have given to inventions of what might be termed atomic-energy devices? In such cases the bill provides that patents shall be issued by the Patent Office, but a license must be secured from the Commission, which I shall describe later in my remarks. After the application for the license is made to the Atomic Energy Commission, under the terms of the bill the Commission must submit to the Congress a complete study of the economic, social, and international consequences of the issuance of such license, and the Congress shall have 90 days in which to enact any legislation which it feels may be necessary in the premises. That is a distinct departure from our usual way of doing things; but we must remember that atomic energy makes its own rules. It is sui generis. After the Congress has 90 days in which to act and either acts or does not act, the Commission, as the case may be, may issue a license to the patentee to use the atomic-energy device.

I should like to describe the administrative organization of the Commission. The Commission is composed of five members, to be appointed by the President, with the advice and consent of the Senate, the chairman to be paid \$17,500 a year and the members \$15,000 a year. This is the over-all policymaking commission.

Under this Commission, provision is made for a military liaison committee composed of members of the armed forces, to be appointed, respectively, by the Secretary of War and the Secretary of the Navy, to advise and consult with the Commission on military matters relating to atomic energy. This committee has the right, if it so desires, to appeal to the Secretary of War and the Secretary of the Navy on any matters pertaining to military affairs and the way they are being handled by the Atomic Energy Commission.

The bill further provides for a technical advisory committee, to be appointed by the President, which shall meet four times a year, and which shall be on a part-time basis, to advise and consult with the Commission on scientific and technical matters relating to materials, production, research, and development.

Finally, the bill provides for the establishment of a new standing committee—

Mr. DOWNEY. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. DOWNEY. Is the technical advisory committee which the Senator has mentioned to be composed of scientists and technicians?

Mr. McMAHON. The Senator is correct. The bill also provides for a new standing committee, to be composed of nine Members of the Senate and nine Members of the House of Representatives, who will act in all respects as the agent of the Congress for the purpose of

keeping in congressional touch with the developments of atomic energy and the actions of the Commission.

The bill makes provision for free mining. We have not attempted to take over all the uranium in the United States. We have provided the Commission with the power to condemn and pay just compensation for any uranium supplies which it is unable to buy in the open market. We believed that it was important and necessary to see to it that the independent mining system which now exists in the United States should not be disturbed any more than was absolutely imperative for the security of our country. We have tried to provide for free science and free research, because we realized that unless we left men's minds free to research, invent, and discover in this field we would be doing a disservice not only to nuclear physics, but to science as a whole.

Mr. President, there are two kinds of security. One kind comes from locking the doors, pulling down the shades, watching the files, and seeing that this man does not talk with that man—compartmentalization, as it is called in Army circles. Then there is the kind of security which I call security by achievement; in other words, security which will come from a more speedy, more complete, and more efficient way of producing atomic energy.

Security by achievement cannot be realized if we try to encompass by stringent security rules the minds and intellects of our scientists. So we have left our scientists free to think and free to produce. We have had to impose some restrictions, which perhaps we might wish we did not have to impose. Yet, Mr. President, until there can be international control of atomic energy we could not do otherwise than see to it that any possible enemy of our country should not receive information which, in the absence of safeguards and controls, might be used for aggression against us.

Mr. TUNNELL. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. TUNNELL. I should like to ask the Senator what the license which the Commission grants authorizes to be done?

Mr. McMAHON. I assume that the Senator is asking me about the license in connection with an atomic-energy device.

Mr. TUNNELL. That is correct.

Mr. McMAHON. Under such a license the owner of the invention may proceed to manufacture, further develop, and use the device.

For instance, let us assume that there was an atomic-energy device which was capable of being placed in a locomotive and hauling a train from Washington to New York. Let us assume that the Pennsylvania Railroad was the licensee. The Senator will appreciate, as was so well said by the Senator from Michigan during the conduct of our deliberations, that if we were to wake up some morning and were to read in the Washington newspapers a story that that development had come about overnight, without the proper amount of planning and

forethought, it might precipitate the economy of the country into chaos.

Mr. TUNNELL. Then, as I understand the Senator, in order to manufacture devices for the use of atomic energy, it will be necessary, will it not, to have a license from the Commission?

Mr. McMAHON. The Senator is exactly correct.

Mr. TUNNELL. Very well.

Mr. McMAHON. I reiterate that the Commission cannot grant a license until it reports to the Congress on the basis of a thorough and complete study of what the Commission believes will be the economic, social, political, and international consequences of the use of the device.

Mr. TUNNELL. The Commission, then, will report to Congress in the case of each device?

Mr. McMAHON. Exactly so.

Mr. TUNNELL. I thank the Senator.

Mr. THOMAS of Utah. Mr. President, will the Senator yield to me, to permit me to ask a question at this point?

The PRESIDING OFFICER (Mr. JOHNSTON of South Carolina in the chair). Does the Senator from Connecticut yield to the Senator from Utah?

Mr. McMAHON. I yield.

Mr. THOMAS of Utah. That does not mean, does it, that Congress would put a lid upon progress or upon improvement? No provision is made or method prescribed which would require the showing of economic necessity for the use of a lighter metal than steel, for instance, or something of that sort which might affect the steel industry, just as the use of stronger energy might affect industries which are now using energy of another kind? It does not mean that Congress would be the judge and would weigh the problem of a proposed change, and would, therefore, be found in a position to renounce progress or to keep it static? It merely means that all the people will know what is happening. Is not that the idea?

Mr. McMAHON. There will be no disposition, I am sure, to restrict the use of atomic energy in our industrial life. We have tried to write the bill with the idea in mind of promoting the further invention, the further discovery, and the further use of atomic energy. All we have tried to do is to set up certain safeguards against throwing atomic energy into our economy in such a haphazard way or such an overnight way as to cause consternation, chaos, and even, perhaps, the destruction of our economy.

Let me say to the Senator from Utah, suppose there was no such provision as the one contained in the bill; suppose a license were to be granted, upon application, to the Pennsylvania Railroad, and suppose that railroad proceeded to use it. What would happen? Certainly the coal mines would immediately decrease their production. Perhaps hundreds of thousands of miners would be thrown out of work. The railroad itself, inasmuch as it secures a large income from the transportation of coal, might be seriously affected. As the Senator knows, the securities of the railroad companies are owned in large part by the insurance companies of the United States. Such a

change might undermine the values of all such stocks and securities held by the insurance companies; their present values might be reduced 80 percent, so that overnight we would have economic chaos.

I wish to emphasize to the Senate that the committee wrestled long and seriously with this problem just as it did with every other problem involved. Every facet was examined. Every argument was met. So, the bill as reported by the committee is the unified conclusion of the 11 Senators who spent 5 months on this bill.

Mr. HUFFMAN. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. HUFFMAN. Then the purpose, as the committee conceives it, is to bring about evolution in the use of atomic energy in our industrial life, rather than to bring about revolution by a sudden substitution of atomic energy for our existing forms of energy. Is that correct?

Mr. McMAHON. We went to school to the scientists, as I am sure Senators will realize, and we talked with just about everyone whom we thought could help us with this problem. I say to the Senator that I have great faith in the future of atomic energy, industrially as well as medicinally, indeed in those respects it is here today. Let us consider an example of perhaps lesser importance: As an aid, for instance, in the discovery of new oil wells, it has been used recently. However, after all, we now have an economy which is built upon water power and upon coal and upon an integration of our natural resources as they are today. If overnight a cessation of one of those great industries were to occur, we might lose the benefits of atomic energy because of the very destruction of the base of our Government, which is economic stability.

Mr. HUFFMAN. Yes. And if we were to be plunged into the use of atomic energy overnight, it would, in the Senator's opinion, would it not, completely wreck our present economic system?

Mr. McMAHON. I can say to the Senator that it is my conviction that if what I cited in the example to the Senator from Delaware were to occur, without any previous planning with respect to how to provide for the employment of the men who would be thrown out of work by even the one use which I then suggested we would be playing with fire.

Mr. HUFFMAN. I thank the Senator.

Mr. HATCH. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. HATCH. I have been reading the provisions relating to public lands, as found on page 43 of the bill. I should like to have a little information about the provisions, if the Senator is able to give it to me. I observe in subsection (7), on page 43, a provision that all fissionable materials in the public lands "are hereby reserved for the use of the United States."

First, I observe that there is a provision that all fissionable material is reserved to the United States—that is to

say, such material which is in the public lands of the United States. Then there follows an exception.

Mr. McMAHON. Yes.

Mr. HATCH. That exception is in the language—

Except that with respect to any location, entry, or settlement made prior to the date of enactment of this act no reservation shall be deemed to have been made, if such reservation would deprive any person of any existing or inchoate rights or privileges to which he would otherwise be entitled or would otherwise enjoy.

Mr. McMAHON. If a man takes out a patent on a piece of public land and spends the necessary \$100 a year in order to perfect his right, he has title to the uranium which may be mined until he separates it from its place in Nature. When he separates it from its place in Nature he must receive a license from the Commission before he may dispose of or remove the material.

Frankly, there is only this difference between the Senator from New Mexico, who after the passage of the bill takes a patent on a piece of land, and myself, if I have heretofore obtained in the State of Colorado, let us say, a patent on a piece of land containing this material: In the Senator's case, when he goes to the Secretary of the Interior he will have placed in his patent a reservation to the title of all the uranium, thorium, and all the materials which are later determined by the Commission to be capable of producing atomic energy, whereas the Senator from Connecticut, who had previously acquired his patent, will have the title, but will be unable to sell any of the source materials to anybody except the Commission when he takes them from their place in Nature.

Mr. HATCH. Suppose that subsequent to the general release to the public of the discovery and uses of atomic energy, numbers of persons have gone into the Western States and have merely filed mining claims on lands which proved later to be capable of producing sufficient material of the kind to which the Senator has referred. They have no patent now, but they do have the right which was acquired by the filing of the claim in the first instance. They have done nothing from that time to the present date, but all the fissionable material in all those lands—

Mr. McMAHON. The source material.

Mr. HATCH. The source material belongs, under this bill, to those individuals.

Mr. McMAHON. It may seem that the right is worth money, but allow me to point out that the minute the individual digs the source material from the ground and separates it from its place in nature, he has only one customer, namely, the Commission which is created under this bill. He must receive a license before he may move that source material from above the ground, where he has separated it from its place in nature, to the smelting mill.

Mr. HATCH. I am sure that a license would not be denied arbitrarily. He would receive the license and he would sell to the Commission.

Mr. McMAHON. He would receive just compensation as provided under the bill.

Mr. HATCH. There is another clause in the same section which causes me to question the meaning of it. Suppose the Commission did not wish to buy material.

Mr. McMAHON. That situation is provided for in the last sentence of the paragraph. The language there is:

If the Commission does not require delivery of such material to it, the reservation made pursuant to this paragraph shall be of no further force or effect.

Mr. HATCH. Under those circumstances, the individual would have a complete right to sell or otherwise dispose of his material?

Mr. McMAHON. Yes.

Mr. HATCH. Is that what the committee wants to accomplish?

Mr. McMAHON. Yes; because if the Commission should ever take the position that it did not want any specific amount of thorium or uranium, the Senator may be assured that it would be of such concentration that it would not be feasible to use it for the production of fissionable material.

Mr. HATCH. Then, there is no absolute reservation to the United States. It is subject to the will of the Commission.

Mr. McMAHON. The reservation which is made by the Secretary of the Interior is in favor of the Government—in this case, the Commission. The Commission has the right to purchase every single ounce of the material at a fair and just price. If the Commission should decide that it did not want to buy the material, theoretically the miner would have the right to sell it to some one else. Such right, I believe the Senator from New Mexico will agree with me, is illusory and is worth nothing. If the Commission does not buy the source material, the man who separates it from the ground does not, under the terms of the bill, have any right to export it. Under this bill, the exportation of source material would be a crime punishable by imprisonment. What will the miner do with it? Will he go to the labor of digging it and bringing it above the ground if he may not export it or sell it to the Commission? The result will be that the material will remain in its place in nature.

I can conceive of the Commission saying to the Senator from New Mexico and to the Senator from Connecticut, who may be working a deposit in the State of New Mexico, for example, "We do not want to buy it. For the purposes of conservation we do not want to touch it. We shall refuse you a license to remove your uranium." Very well; since we may not export it or sell it to the Commission, would the Senator from New Mexico proceed to dig the uranium and thorium out of the ground?

Mr. HATCH. Perhaps he would not, but I am trying to understand what the bill means, I and I am already convinced that there is not a complete reservation of title to the United States Government in the Government-owned lands.

Mr. JOHNSON of Colorado. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. JOHNSON of Colorado. One further difficulty which the Senator from Connecticut has not mentioned lies in the

fact that uranium ore is a complex material. In our area of the country, at least, it usually found with vanadium. There are times when it is very necessary to have vanadium production. If the restrictions which the Senator from New Mexico is insisting upon are to be placed in the bill, not only would the production of uranium be stopped but also the production of any of the ores which are found with it, such as vanadium. That would be a very serious matter. The vanadium industry in the States of Arizona, New Mexico, Colorado, and Utah—the only States in the United States which meet together at four corners—is very important. The area formed by the joining of the four States holds deposits of vanadium and uranium. Vanadium is highly desirable in the steel industry. If there is to be an absolute restriction to the removal of uranium from its natural place in the earth, the production of vanadium will be brought to an end.

Mr. McMAHON. I thank the Senator.

Mr. HATCH. I have not insisted on any restrictions whatever, I may say to the Senator from Colorado. I am trying to find out what the bill means. However, I repeat that an absolute reservation has not been made to the United States. A reservation has been made which may, or may not be effective on the commission. That may be a wise course to follow, but that is the effect of the language, as I read it.

Mr. HICKENLOOPER. Mr. President, will the Senator yield to me?

Mr. McMAHON. I yield to the Senator from Iowa.

Mr. HICKENLOOPER. I may suggest to the Senator from New Mexico that this matter was very thoroughly studied by the members of the committee from the Western States. First, the object was to give the United States a preemptive right in the material itself, reserving the greatest possible freedom for private exploration and mining development. In other words, we discussed the fact that if we were to insist upon too many restrictions it would perhaps discourage, if not put an end to, mining development and exploration.

It will be noticed that in paragraph (5) on page 42, under the heading "Acquisition," the Commission is directed—the bill uses the word "directed"—to purchase uranium that is discovered on already patented property or property in which rights have already been acquired. In paragraph (7), on page 43, referring to public lands, there is first a preemption of such material; in other words it is reserved primarily in place for the Government of the United States subject to the Government through this Commission, being able, if it is of no value to the Government, to divest itself eventually of uranium that might be a drug on the market at some time in the future. It was an attempt, first, as I understand—and I wish to be corrected by the chairman of the committee if my statement is not correct—to reserve uranium in any public lands for the undisputed use, control, and acquisition by the Government, and the right of the Government to fix just compensation for its separation from other ores, so that it would not necessarily disturb the dis-

covery and production of other metals. Consequently—and this is, perhaps rather important—it allows the Government at some time in the future to divest itself and to get out from under the responsibility of buying, if, as, and when, it may not be desirable on the part of the Government to do so. That time may never come, but I can assure the Senator from New Mexico that a very great deal of thought was devoted to this question by the two Senators from Colorado who are vitally interested in the mining industry and I believe they are both satisfied with this provision.

Mr. HATCH. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. HATCH. Did the committee have any witnesses from the Bureau of Mines of the Department of the Interior?

Mr. McMAHON. Yes, we did. I do not recollect whether they came from the Bureau of Mines, but I remember talking with the Solicitor, Mr. Gardner, about these provisions. The Department made no objection to them. The only suggestion they made was that if this bill was to be long delayed, they would like to see put in operation the general bill which the Senator reported some days ago and which is on the calendar. The then Secretary of the Interior, Mr. Ickes, also appeared and testified. I do not recollect that his testimony went into detail as to the treatment of the public lands, but I do remember the subject was referred to in the testimony. I know of no objection, by the Secretary of the Interior.

Mr. HATCH. The general bill?

Mr. McMAHON. Yes, that is correct.

Mr. HATCH. That is the present Secretary of the Interior?

Mr. McMAHON. Yes, Mr. Krug.

Mr. HATCH. The Senator is aware, is he not, that under Executive order all these lands are withdrawn from any development or exploration?

Mr. McMAHON. That is true.

Mr. HATCH. It was considered so important at that time that they were absolutely withdrawn.

Mr. McMAHON. That is correct.

Mr. HATCH. And they have been withdrawn by another Executive order which I think was issued later, because it was deemed that the first one was not sufficient, and it was thought that they should be withdrawn prior to the Congress enacting the provisions contained in this bill.

Mr. McMAHON. That is why the particular provision is in the bill.

Mr. HATCH. There are involved monopoly practices, and the absolute control of western lands, as against those who have gone out and secured prior rights. I did not want to raise any question about it, but I did want to point out what I think may happen under the bill. The Senator and his committee have probably given consideration to the matter, but there still is perhaps a private monopoly created by the bill.

Mr. McMAHON. Let me give the Senator the other side of the picture. Upon the sources of these materials may well rest the very security of this Nation. We must, as the committee sees it, make any effort to encourage the independent

prospector to go out and develop. That is the basis of the committee's action.

I learned, I may say parenthetically to the Senator, many lessons in mining law from the Senators from Colorado, who are on the committee, and I learned much about the way independent prospectors carry on their operations. So we weighed this problem from every angle, and decided it was better to encourage the independent prospector to find and discover other deposits and to see to it that when they were discovered the commission would be the only buyer of them at a price fixed by the commission.

I might add that in the case of the public lands, where uranium and thorium are dug out of the earth, the Senator will see that there is no compensation to be paid for the mineral per se, but only to reimburse for the discovery and the digging of it and the necessary work involved in getting it out of the ground.

Mr. CORDON. Mr. President—

Mr. McMAHON. I yield to the Senator from Oregon.

Mr. CORDON. I do not quite understand how exploration would be encouraged under the terms of paragraph 7, on pages 43 and 44, in view of the fact that the Commission is given the power of determining, first, that it will purchase source materials, or second, that it will not. In other words, a prospector is faced with a contingency that, no matter what the discovery, he cannot do anything with it.

Mr. McMAHON. That may be a correct conclusion, but before the prospector goes out, there is no question but that the Commission will have a standing offer for so much uranium at such and such a price, so that the prospector will go out looking for and digging uranium with that offer in mind. We certainly cannot force the Commission, leaving them without discretion to purchase all the uranium that may be offered to them, because that might result in moving the material from its place in nature, where maybe it ought to be kept for the time being, and only so much taken out as is necessary for the proper development of this science.

Mr. CORDON. Mr. President, will the Senator further yield?

Mr. McMAHON. I yield.

Mr. CORDON. Would it be the Senator's view, then, if the Commission desires the source materials and advertised that it was in the market for the materials, that that holding out on the part of the Commission would represent any liability on the part of the Government to purchase in case the prospector, relying upon that statement, had expended his time and money and made a discovery and produced the source materials.

Mr. McMAHON. I think that if the Commission posted a price of "X" dollars a ton for uranium and while that price was posted the Senator were to go out and dig a ton of uranium, certainly the ethics of the situation, if nothing else, would require the Commission to take over the ton of uranium.

Let us assume that after the Senator has dug his ton of uranium the Commission says, "Now, Brother CORDON, that is all we want. If you dig any more you will have to store it on top of the

ground." Then the Senator would go ahead and dig at his own risk.

Mr. CORDON. The question, if I may call the Senator's attention to it again, was, in the Senator's opinion, is there any legal obligation upon the Commission to purchase, if it has held itself out as being prepared to purchase, and has, as the Senator suggested, placed its purchase price or offer price on the ore? The Senator says that on the ground of ethics there may be an obligation, but it has been my experience that the Government of the United States may desire that its people be ethical, but it does not always follow suit.

Mr. HART. Mr. President—

The PRESIDING OFFICER (Mr. HUFFMAN in the chair). Does the Senator from Connecticut yield to his colleague?

Mr. McMAHON. I yield.

Mr. HART. Mr. President, I think it should be said that it is not so simple as to be merely a question of ore that contains only uranium. Uranium ores are always complex. Vanadium is almost always found in the same ore, and up to the time when we began to use uranium, the ore was picked over for the extraction of vanadium and uranium went out on the dump. Mining development should and will go on even if the uranium is not used.

Mr. JOHNSON of Colorado. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. JOHNSON of Colorado. The uranium deposits in the United States are very limited. As a matter of fact, the only uranium ores we have discovered so far are very low grade, with only a trace of uranium. We wanted to be certain, in writing this section on public lands, that under the theory that there might be uranium in complex ores, the Government might restrict all ores in the United States, simply under the theory that there was a trace of uranium. So we had to protect the mining laws, as well as protect the Government in the acquisition of uranium ores. It is not so simple a problem as one might think. If we put in our law an absolute prohibition with respect to the mining of uranium ores, we are going to stop the mining of all ores, and, of course, that would be a very great disadvantage to the country, and to the West particularly.

Mr. McMAHON. I thank the Senator.

Mr. HATCH. If the Senator will yield, to some extent that did happen when the withdrawal order of the President was issued. We stopped much prospecting in the Western States. My point was simply to see, if possible, if the Government was protected. I am wondering whether it has not been proposed by an international authority that all ores should be somewhat controlled by that authority.

Mr. McMAHON. The bill provides for outright ownership of the material itself.

Mr. HATCH. Wherever it may be located?

Mr. McMAHON. That is correct. I might say to the Senator that there is a provision in the bill that any arrangement made internationally on this subject shall take precedence over any provision in the bill.

Mr. HATCH. I thank the Senator for his explanation.

Mr. JOHNSON of Colorado. Will the Senator yield further?

Mr. McMAHON. I yield.

Mr. JOHNSON of Colorado. I should like to call attention to the fact that once this source material is removed from its natural place in the earth the bill provides for an absolute confiscation of it. That is, if the Commission wants to confiscate it, it takes it over at its own price. But the thing we wanted to be careful about was placing a prohibition against its development while it was in place, for fear of doing violence to other metals and other resources, and to the development of our whole mining area. That is the thing we had to guard against. But the committee did not hesitate, and this bill provides that when the source material has been removed from its natural place in the earth it shall go to the United States Government. It goes to the Commission directly, and at the Commission's own figures and own price.

Mr. HATCH. I would not quite agree with that statement if it were not for the last sentence that was used, that if the Commission does not desire the material, then the reservation is no longer effective. That would leave it wide open to sale, export, or anything else, if it were not for the other provisions of the bill, which I assume, from what the Senator from Connecticut said, do prohibit sales and export.

Mr. McMAHON. That is true. Not only is the export of source material prohibited, but the export of fissionable material is also prohibited. We also in the amendment prohibit the export of any important component part of any device to produce fissionable material.

I may say, Mr. President, that there are one or two industries in the United States which use thorium today, though not in very great quantities. I talked with the president of one of these companies recently. It interested me very much to discover what a wide market there still was for gas mantles, and there is some thorium used for that purpose.

Let us assume that the Senator from New Mexico owns a claim and produces a ton of thorium. He offers it to the Commission, and the Commission says, "We have enough thorium, but we will let you sell it to the X Manufacturing Co., which in turn has to get a license for that purpose."

Mr. President, I think I have pretty well gone through the bill.

Mr. CORDON. Mr. President, will the Senator from Connecticut yield?

Mr. McMAHON. I yield.

Mr. CORDON. I thought the Senator was going through the bill section by section. I have a couple of questions to ask, if I may.

Mr. McMAHON. I yield.

Mr. CORDON. I note on page 58 of the bill this provision:

It shall be the duty of the Commission to declare any patent to be affected with the public interest if—

Then certain conditions are set out. Does the Senator take the view that it is within the power of the legislative body of the United States by statute to determine what is or is not affected with pub-

lic interest? Is not that purely and solely within the province of the courts?

Mr. McMAHON. No; I think not. If the Senator will turn to the policies and purposes of the proposed Act, as set out at the beginning of the bill, he will find, I think, a very cogent statement of the policies and purposes of the proposed act contained on pages 26, 27, and 28.

The Commission would be bound in exercising its power under the section to which the Senator has referred, to turn to the policies and purposes set forth in the bill. What are those policies and purposes? I read from the bill:

(b) Purpose of act: It is the purpose of this act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the field.

Mr. CORDON. The point I make is that in the last analysis, if it comes down to a purely legal question of the power of the Government to control these patents by license or otherwise, the decision as to whether this activity, or the rights under the patents, as the case may be, are affected with public interest, would rest in the court, and the court would not be bound by any legislative declaration.

Mr. McMAHON. I think not. I do not agree with the Senator. I think when the Commission is authorized to declare a patent affected with the public interest, it would of course only do so provided the patent used atomic energy, and provided it used fissionable material, and before it granted a license to use the invention it would first have to come to the Congress with a thoroughgoing report on the whole subject.

Mr. CORDON. Will the Senator further yield?

Mr. McMAHON. I yield.

Mr. CORDON. The question is going to arise, I think, sooner or later, and I want to call attention to the decision of the Supreme Court, I believe, in the AAA case, in which Congress attempted to regulate agriculture, and the Supreme Court found that the act was unconstitutional because agriculture was not affected with public interest, even though the Legislature had attempted to say that it was.

Mr. McMAHON. I will say to my good friend from Oregon that, with all due deference to him, I would attempt to draw from the Butler case, frequently

referred to as the AAA case, no analogies which would govern the interpretation of this subject which has within its being the power to destroy us or make for a better world in the future.

Mr. CORDON. I have no doubt that that determination will be made by the Court, but the point is that I think it is up to the Court to make it.

Mr. McMAHON. I tried to emphasize to the Senate when I started that the committee became convinced that this subject wrote its own rules. It writes them out of the compulsion of logic. It writes them out of the sheer necessity that is inherent in this tremendous force. I say to the Senator that included in this bill are some things which the committee accepted only reluctantly, because I would be less than frank with the Senate if I did not emphasize that in some respects we have departed from our former method of handling public questions. I say to the Senator that logic compels our conclusion.

Mr. MILLIKIN. Mr. President, will the Senator yield to me?

Mr. McMAHON. I yield.

Mr. MILLIKIN. I should like to emphasize further the thought that the distinguished Senator from Connecticut has just expressed. This bill is full of provisions which I would not subscribe to in any other connection. I could not possibly regard what has been done here as a precedent in any other direction. I think it would be useful for the RECORD to have the distinguished chairman of the committee say that that was the sense of the committee, and that it was thoroughly understood in the committee that these extraordinary measures shall not be considered as a precedent for other legislation.

Mr. McMAHON. I stated, as the Senator from Colorado knows, my opinion during the deliberations of the committee exactly to the effect just stated by the Senator from Colorado. I think it is all bound up in the thought that logic compelled and necessity required that we should do what we have done in respect to mining, in respect to patents, in respect to the question of Government ownership of the production facilities of fissionable material, and in the requirements that one shall be permitted to have at his disposal material which might constitute a private army or the force of a private navy. It was the realization that this material contained within itself that from which great blessings might flow, but also, unhappily, unless we handle it correctly and unless it is internationally controlled, unless we get effective—and I emphasize "effective"—methods of control of atomic energy, I say to the Senators that I for one will feel most discouraged as to our future. It is because we realized all that, that we decided that it had to be treated as we have treated it.

Mr. CORDON. Sui generis.

Mr. McMAHON. Sui generis, as I previously stated to the Senate today.

Mr. MURDOCK. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. MURDOCK. Realizing that the distinguished Senators from Colorado, as I understand, have both participated

in the consideration and framing of the bill in committee, and due to the fact that I have not had time to give it extensive study, I ask, What is the effect of the bill on the status of a prospector who goes out and locates a lode claim, or a placer claim for that matter, prior to patent or prior to the issuance of a license or permit of any kind by the Department of the Interior? What effect does it have on the status of the ordinary prospector who goes forth looking for ore of any kind?

Mr. MILLIKIN. Mr. President, will the Senator yield?

Mr. McMAHON. I shall be glad to refer that question to one of the mining experts on the committee, the other being the senior Senator from Colorado [Mr. JOHNSON].

Mr. MURDOCK. Realizing that we had two such experts I wanted their opinion on this question.

Mr. MILLIKIN. I think my distinguished colleague the senior Senator from Colorado will agree that we were both very meticulous to see that if a man has a valid mining claim, if he has made a valid location, the reservation shall not apply as against him.

Mr. MURDOCK. As I understand the Senator, if the location of the claim has been perfected before the effective date of this act, then the Senator says any locator in that situation is fully protected by the provisions of the bill. But having in mind the prospector who does not have a perfected location on the effective date of this act, but has one after its enactment, after it becomes effective, what is the effect of the bill on his activities as a prospector and a locator on a valid lode claim or placer claim after the effective date of the act?

Mr. MILLIKIN. I should say that if he does not have those vested and inchoate rights which a locator on the public domain acquires from making a valid location and doing the things subsequently required by law—if he is not in that status, if he has not reached that status, he continues to have his exploratory rights, but if he should find fissionable material, then it would be subject to the reservation which applies to the public domain which has not been validly entered for mining purposes.

Mr. MURDOCK. If the Senator will indulge me for a further question or two, let us assume, as has been suggested by the distinguished Senator from Connecticut [Mr. HART], that uranium is found in complex ores. Let us assume that the prospector, after the effective date of this act, discovers a ledge or a lode of lead ore. The large percentage of commercial value is in lead, but his assay shows at least some values in uranium or other fissionable material. What does that mean so far as the locator of the claim is concerned?

Mr. MILLIKIN. Has he made a valid location?

Mr. MURDOCK. We will assume that after the effective date of the act he makes a valid location. He has perfected the location, so far as it can be perfected, but it still is a location, and has not proceeded to patent. In the extraction of his ores from the lode, he finds that among other values it has some values in fissionable materials.

Mr. MILLIKIN. Under the case stated, it is my judgment that the uranium part of his ore would belong to the United States Government, but that that would not prevent him from exploring and developing the other ores.

Mr. MURDOCK. Of course, the mine locator is not in a position to separate the fissionable material from other material. Will he be interfered with at all in his regular processes or procedure of shipping the ore to the smelter and handling it as he handled it prior to the enactment of the law?

Mr. MILLIKIN. In my judgment some regulatory power would have to be exercised to see that such a situation did not arise. The Commission proposed to be established would prescribe certain rules and standards regarding the protection and handling of source materials. It seems to me that the Department of the Interior, on its part, could make rules which would not hinder the prospector, but would allow him to develop those things which were not fissionable; and that between the two bodies it would be possible to enable him to mine complex ores, and at the same time not allow fissionable materials to get out of control.

Mr. MURDOCK. In the opinion of the distinguished Senator from Colorado, is there anything in the proposed legislation which would discourage prospecting for ores on public lands?

Mr. MILLIKIN. I will say to the distinguished Senator that we tried scrupulously to accomplish what we had to accomplish in this bill, and at the same time encourage prospecting, because we all realize that we want to obtain fissionable materials, and that the only way we can get them is to encourage prospecting. We received many suggestions which would have locked up this whole thing in the public domain; whenever there was a suggestion of a fissionable material, it would at once become locked up and taken away, removed from the opportunity of the prospector. But we all decided that since we want fissionable materials we should encourage the production of such materials. That is one of the reasons why we were so careful to exempt the rights of a man who has a valid location. We felt that so far as we could draw an analogy there should be preserved the same kind of freedom in the prospector to find the fissionable ores as we want to preserve in the scientist to develop fissionable ores.

Mr. MURDOCK. I thank the distinguished Senator for his answer. Coming from him, it is a sufficient assurance to me as to the rights of the prospector. I think I realize as keenly as does anyone else that in the mining, production, and treatment of fissionable materials there is a problem. I heartily approve what the Senator from Connecticut has said, but I thoroughly agree with the Senator from Colorado that we want to encourage the discovery and location of fissionable materials. I believe that we can repose full confidence in the American prospector. He will be just as anxious and just as willing as any other part of our population to cooperate in safeguarding this material.

I thank the Senator.

Mr. MILLIKIN. I should like to ask my distinguished colleague the Senator from Colorado [Mr. JOHNSON] if he is in accord with the expressions which I have made.

Mr. JOHNSON of Colorado. Yes; I am in full accord with them. Any claims which are located prior to the enactment are not in any way interfered with, as is shown in the language which appears on page 43, paragraph (7), beginning in line 10 after the semicolon:

Except that with respect to any location, entry, or settlement made prior to the date of enactment of this act no reservation shall be deemed to have been made, if such reservation would deprive any person of any existing or inchoate rights or privileges to which he would otherwise be entitled or would otherwise enjoy.

That takes care of the man who already has a claim or title to a claim. The next sentence is:

The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources, under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby.

The reservation in that second sentence goes only to the fissionable material. If there is a trace, the Government could control that trace. If there is a considerable quantity, the control extends to the considerable quantity. If the owner of the claim should not wish to mine the fissionable material, if he should adopt a dog-in-the-manger attitude and refuse to mine it, then under this provision the United States Government could go in and mine the fissionable material and pay him for such damage as it might cause to his holdings.

I completely agree with the statement of my colleague.

Mr. McMAHON. I thank the Senator.

Mr. CORDON. Mr. President, will the Senator yield?

Mr. McMAHON. I yield to the Senator from Oregon.

Mr. CORDON. First, let me compliment the members of the committee on a magnificent job in a field of substantially original research. I have run through the bill, and while I realize that no cursory attention to it could put one in possession of even an outline of the amount of research, study, and application necessary before this bill could be drafted, I do recognize that it is a magnificent piece of work.

Mr. McMAHON. I thank the Senator on my own behalf and on behalf of the other members of the committee.

Mr. CORDON. Even so, may I be critical again for a moment?

On page 61, continuing on page 62, are provisions in connection with the power to take patent rights. I find there standards for determining fair compensation. It has always been my understanding of the law that that is solely the judicial province, and that standards may not be established by the legislative body. I

should like to have the view of the chairman on that question.

Mr. McMAHON. I regret to say that I cannot agree with the Senator's contention that the legislative body has not the right to establish standards for fair compensation. In this bill we have tried to establish fair and just standards in every case in which we provide for the taking of private property, and standards which can be wisely administered.

Mr. CORDON. Please understand that I have no criticism of the standards which have been established, or of the good faith and intention of the committee in establishing them; but that question arose in my mind, and I desired to have the Senator's view on it. I thank the Senator.

Mr. McMAHON. I thank the Senator from Oregon.

Mr. HICKENLOOPER. Mr. President, will the Senator yield to me?

Mr. McMAHON. I yield.

Mr. HICKENLOOPER. May I suggest to the Senator from Oregon that on page 62 there is provided an ample judicial review for anyone who is aggrieved by the application of the standard rule by the Commission?

Mr. McMAHON. Mr. President, there are only two more matters which I wish to refer to briefly, because time goes apace and, under the agreement, for this all-important matter we have only 2 hours in which to conclude its consideration.

I wish to refer, first, to the fact that in the bill we have made ample provision for the promotion of research, because, as I have previously indicated, we realized that unless we have progress in this field, we shall certainly drop back into a second-place position. So, under section 3 of the bill the Commission is directed to exercise its powers in such manner as to continue the conduct of research and development activities. Under the bill the Commission is empowered to conduct its own research operations. I call attention to the fact that the Commission is also authorized and directed to make arrangements, including contracts, agreements, grants in aid, and loans, for the conduct of research and development activities relating to atomic energy.

I desire to refer briefly to the fact that in section 6 of the bill we have carefully considered the subject of military applications of atomic energy, and under that section we provide for the complete monopoly of production of atomic weapons within the proposed Commission. That does not mean that the Navy and the Army will not have a right to conduct research in the field of atomic energy and atomic weapons. That does not mean that any citizen may not, independently of Government or of grants in aid of the Army or the Navy, proceed to use his inventive genius for the purpose of bringing about an improvement in the science.

Mr. President, I wish further to call attention to the fact that your committee realized that what we were writing was in a new field—a field in which there had been no experience. So we wisely, I think, concluded to write into the bill a recognition of that fact. If Senators

will examine the bill, they will see that we specifically declare that we are writing interim legislation. I certainly would not be one who would believe that this bill may not have to be amended within a short period of time, because, although I think the committee has labored wisely and well, I think it would be impossible for any group of Senators to sit down and try to write a bill which would be a permanent blueprint in this new science.

Mr. President, it is my sincere conviction that this bill deserves the immediate and favorable action of the Senate. It is in every sense a nonpartisan bill. The subject was of too great importance to receive anything but consideration from the point of view of the national interest. It was approved, as I have indicated, after months of study and preparation, by men of both parties whose only concern was the best interests of our country and the people who compose it. That was the anvil on which every action was hammered out. That was the criterion by which every word was judged.

The bill comes to the Senate with unanimous committee approval. No section, no paragraph, no word was adopted except by unanimous consent. The achievement of unanimity on every phase of a subject so complex and so vital merits the approbation of Senators.

I believe it is an enlightened, forward-looking, common-sense bill, based on the realities of the world in which we live, the peculiarities of atomic energy, and the fundamental principles of our Government. It is a bill based on careful study and extended consideration. Aware of their unique responsibility as builders of the atomic age, the committee members labored long and arduously to forge in the fires of democratic action the finest instrument they could devise in the discharge of their grave assignment.

Mr. President, it strikes me that right here is an appropriate time to express again my profound sense of appreciation of the support and consideration, shown by members of the committee to its chairman.

Mr. VANDENBERG. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. VANDENBERG. The Senator is very kind in his comments in respect to the members of the committee.

I should like to say at this point in the RECORD that I am sure the committee reciprocates the chairman's feelings. One of the amazing things about this report upon this highly technical and involved subject is the fact that it is unanimous. That does not mean that there have not been the sharpest differences in the course of the consideration during the last 5 months. On the contrary, there have been almost bitter differences in the committee in the course of the evolution of the final product.

I wish to say that in my 18 years of service in the Senate and in my service on many committees, I have never known a committee which more zealously and faithfully and loyally undertook its task than this one, nor a committee which more earnestly explored every avenue of its responsibilities. For that net result the chairman of the com-

mittee himself is entitled a very large share of credit. I wish the RECORD to show that, despite all the interim differences, the net report is not only unanimous on paper, but it is unanimous in fact and in spirit. I think that is a great compliment to the chairman, and I present him with this orchid.

Mr. President, I should like to have the RECORD show, in this connection, what the membership of the committee was. It was headed by the Senator from Connecticut [Mr. McMAHON], and the other members were the Senator from Georgia [Mr. RUSSELL], the Senator from Virginia [Mr. BYRD], the Senator from Colorado [Mr. JOHNSON], the Senator from Maryland [Mr. TYDINGS], the Senator from Texas [Mr. CONNALLY], the Senator from Vermont [Mr. AUSTIN], the Senator from Colorado [Mr. MILLIKIN], the Senator from Iowa [Mr. HICKENLOOPER], the Senator from Connecticut [Mr. HART], and the senior Senator from Michigan [Mr. VANDENBERG].

Mr. President, my time is running out and I do not intend to prolong the debate, but I wish to add before taking my seat that not only were there tremendous differences within the committee but also in the scientific world, as well as differences between the scientific world and the congressional viewpoint. Those differences often flamed during the course of the 5 months into what sometimes promised to be almost a fatal difficulty. But there again we reached unanimity of conclusion at the end of our consideration, and I think the scientific world approves the proposed legislation as completely as does the committee. I merely make that statement inasmuch as the Senate, on a matter of this utterly technical character, must necessarily accept the judgment of its committee, and must act substantially on the basis of confidence and faith in the committee's work, although in this instance confidence and faith are justified.

I express only the prayer and hope that the success which we have had in thus meeting the domestic problem may soon be paralleled in the larger area where, under the auspices of the United Nations, we must find an international formula for the international control of atomic energy on a basis which will effectively prohibit the use of atomic energy for destructive purposes anywhere in the world, and which will dependably police such situation against anyone who exercises bad faith. Except as we can move from this unanimous action to the larger unanimous action in the world itself, we shall hereafter confront the kind of destruction which may involve a war which will last minutes instead of months, and in which the first casualty list will be the last.

Mr. McMAHON. Mr. President, I am very grateful to the Senator from Michigan for his most generous remarks. I appreciate them very much.

Mr. JOHNSON of Colorado. Mr. President, will the Senator yield?

Mr. McMAHON. I yield to the Senator from Colorado.

Mr. JOHNSON of Colorado. I wish to concur in the eloquent remarks of the Senator from Michigan, and the statement of the Senator from Connecticut,

the very able chairman of the Special Committee on Atomic Energy.

While we are passing out compliments I do not believe that we should overlook our very efficient staff consisting of Dr. Condon, of the Bureau of Standards; James Newman, our counsel; Christopher Boland, the staff director; and other persons who were certainly faithful, and efficient. We had differences of opinion even with them, but all those differences were resolved. One difference of opinion—the Senator from Michigan hinted at it—was between the scientists and the Army. Our committee was able even to resolve that difference to the entire satisfaction, I think, of the scientists and of our highest military authorities. So, in our committee, Mr. President, we have really been doing some resolving.

Mr. McMAHON. If we could only get the Senate to resolve the bill, we would be entirely satisfied. I thank the Senator from Colorado.

Mr. WHERRY. Mr. President, I have not been on the floor during all the debate concerning the pending measure, and during the time when orchids were being handed out, but I should like to add my appreciation to the services of the members of the committee and its staff. At the same time, I should like to bring them all back to the realities of the bill.

Has there been any statement made with reference to international arrangements?

Mr. McMAHON. Yes.

Mr. WHERRY. Is there any limitation which is to be placed upon the authority in respect to whatever arrangements may be made by the Commission, and are those arrangements to be referred back to the United States Senate in the form of a treaty to be ratified by the Senate?

Mr. McMAHON. Of course, we must appreciate that this bill deals with atomic energy within our own country. It is the business of the executive department, under the Constitution, to conduct negotiations looking to international arrangements. As the Senator knows, a very eminent and distinguished American, Mr. Bernard Baruch, was appointed by the President and confirmed by the Senate as our delegate to the United Nations Committee which will try to reach an agreement on this subject. When that agreement is reached—and may God be willing that it shall be reached—it will have to come back to the Senate for ratification.

I may say further that the Special Committee on Atomic Energy has kept in constant touch with the State Department and with Mr. Baruch. Next week the committee will confer with Mr. Baruch for the purpose of discussing his conclusions with regard to the exact course which should be pursued in the coming negotiations.

Mr. VANDENBERG. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. VANDENBERG. I should like to make one further answer to the Senator from Nebraska. The point which I wish to make is an utterly fundamental one and has been, so far as the Senator from

Michigan is concerned, ever since the bomb was dropped upon Hiroshima.

The United Nations Atomic Energy Committee has been set up under the action of the General Assembly of the United Nations. During the course of that action the record was clearly and distinctly made that every nation resolves to itself, by its own constitutional process, the approval of the ultimate recommendations of the committee.

When Mr. Baruch was appointed as the American member of the United Nations Atomic Energy Committee, and before he was confirmed by the Senate, I sent him a questionnaire in order to be perfectly sure that there could be no doubt with reference to the subject. One of the questions was the one which has been asked by the Senator from Nebraska this afternoon, and Mr. Baruch's categorical reply was that the Senate of the United States must pass upon the ultimate treaty which will contain the ultimate arrangements for the international control of atomic energy and, I hope, for the outlawry of its use for destructive purposes.

Mr. WHERRY. I thank the distinguished Senator from Michigan, and also the distinguished Senator from Connecticut for their statements relative to the question which I propounded. I feel that they have cleared up satisfactorily the point which I had in mind.

Mr. McMAHON. Mr. President, when the opportunity came to present this very necessary bill to the Senate we found that we had only 2 hours in which to do so. I had prepared and was ready to deliver a very extensive and minute analysis of each section of the bill. The committee report was filed with the Senate on April 19. It has been widely distributed to newspaper editors and to the public. I believe the subject has been so well discussed in the public press, and the proceedings of the committee have been so thoroughly understood, that it is not necessary for me longer to trespass upon the time of the Senate by making a more detailed explanation.

I ask unanimous consent, however, to have printed in the RECORD at the close of debate as a part of my remarks the explanation which I had intended to make, had more time been available.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

(The explanation appears in the RECORD at the conclusion of the debate on the bill.)

Mr. President, I close my remarks by saying that I hope that we may, with all possible speed, conclude consideration of this bill. It is my opinion that consideration of the matter has already been delayed too long. I should have been delighted if the Commission, which is provided for in the bill, had been appointed a month ago so that it could have been in conference with Mr. Baruch and with the State Department in aiding and helping in the project of preparing a proposal for the international control of atomic energy. When the bill has been passed we shall have taken a historic step in a solution of one of the greatest problems which ever challenged

the mind of man. I hope it will be found the committee has done its work well, and I trust that Senators can see their way clear to vote for the bill.

Mr. SMITH. Mr. President, will the Senator yield for a question before he takes his seat?

Mr. McMAHON. Will not the Senator permit me to offer several committee amendments to the amendment now pending? They provide for prohibition of the export of the component parts of atomic energy production devices. I call up the amendments.

The PRESIDING OFFICER. The amendments will be stated.

The CHIEF CLERK. On page 37, after line 19, it is proposed to insert the following new subsection:

(e) Manufacture of production facilities: Unless authorized by a license issued by the Commission, no person may manufacture, produce, transfer, or acquire any facilities for the production of fissionable material. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish and shall be issued in accordance with such standards and upon such conditions as will restrict the production and distribution of such facilities to effectuate the policies and purposes of this act. Nothing in this section shall be deemed to require a license for such manufacture, production, transfer, or acquisition incident to or for the conduct of research or development activities in the United States of the types specified in section 3, or to prohibit the Commission from manufacturing or producing such facilities for its own use.

On page 47, strike out lines 4 through 10, and in lieu thereof insert the following:

(b) Prohibition: It shall be unlawful for any person to manufacture, produce, transfer, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon, except as may be authorized by the Commission. Nothing in this subsection shall be deemed to modify the provisions of section 4 of this act, or to prohibit research activities in respect of military weapons, or to permit the export of any such equipment or device.

On page 47, line 14, after the word "manufacture" insert "produce, or export."

On page 47, line 19, after the word "manufacture", insert "production, export."

On page 48, line 13, after the word "manufacture", insert "production, export."

On page 48, line 15, after the word "manufacture", insert "production, export."

On page 48, line 23, after the word "manufacture", insert "production, export."

On page 56, lines 5 and 6, strike out "as the Commission may determine" and in lieu thereof insert "as may be necessary to effectuate the purposes of this act."

On page 66, after line 5, insert the following new subsection:

(c) Advisory committees: The members of the General Advisory Committee established pursuant to section 2 (b) and the members of advisory boards established pursuant to subsection (a) (1) of this section may serve as such without regard to the provisions of sections 109 and 113 of the Criminal Code

(18 U. S. C., secs. 198 and 203) or section 19 (e) of the Contract Settlement Act of 1944, except insofar as such sections may prohibit any such member from receiving compensation in respect of any particular matter which directly involves the Commission or in which the Commission is directly interested.

On page 69, line 13, after "4 (b)", insert "4 (e)."

On page 71, strike out lines 13 and 14, and in lieu thereof insert the following:

(a) The term "atomic energy" shall be construed to mean all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation.

On page 72, after line 15, insert the following new paragraphs:

(f) The term "equipment or device utilizing fissionable material or atomic energy" shall be construed to mean any equipment or device capable of making use of fissionable material or peculiarly adapted for making use of atomic energy and any important component part especially designed for such equipment or devices, as determined by the Commission.

(g) The term "facilities for the production of fissionable material" shall be construed to mean any equipment or device capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission.

The PRESIDING OFFICER. The question is on agreeing to the amendments proposed by the Senator from Connecticut on behalf of the committee to the committee amendment now pending.

The amendments to the amendment were agreed to.

The PRESIDING OFFICER. The question now is on agreeing to the amendment of the committee as amended.

Mr. O'MAHONEY. Mr. President, I regret very much to rise to ask a question at this moment. Perhaps it has already been covered, but I observe the provision with respect to public lands on page 43. I am wondering whether the committee is of the opinion that the language appearing there is sufficiently broad to prevent any person, corporation, or association which may have had anything to do with the atomic project during the war, and which may have acquired, or sought to acquire, locations or rights, inchoate or otherwise, upon the public domain, from perfecting such claims, would such claims be barred by the provision referred to?

The PRESIDING OFFICER. The Chair will take the liberty of stating that the Senator from New Mexico [Mr. HATCH] asked the same question of the Senator from Connecticut.

Mr. McMAHON. They would not be barred.

Mr. O'MAHONEY. Such claims would not be barred?

Mr. McMAHON. They would not be barred.

Mr. O'MAHONEY. I believe that such claims should be barred, and I shall endeavor to write an amendment which I should like to present for consideration. I think it is rather difficult to conceive that the Senate would be willing to pass a bill which would permit any corporation, association, or indi-

vidual who participated in the Manhattan project, or any other project, to take advantage of such participation to assert rights upon the public domain.

Mr. McMAHON. Perhaps I did not understand the Senator's question. Let us assume that the Vanadium Corp. of America were digging uranium on the public lands for the purpose of sale to the Manhattan project. Is that the situation the Senator has in mind.

Mr. O'MAHONEY. I have no reference to any corporation at all.

Mr. McMAHON. I understand that; I am merely using that as an illustration because the Vanadium Corp. was a supplier of the Manhattan project.

If the Senator will read carefully the provision written to take care of the public lands, he will find that if there is a perfected claim the owner of such claim can proceed to prospect it and mine it, but when he has separated the uranium from its place in nature, then he must get a license from the Commission to move it, and he must sell it to the Commission. I might say to the Senator that all that he is compensated for is the digging, the exploring, the taking of it out of the ground.

Mr. O'MAHONEY. No compensation is allowed for the value of the material itself?

Mr. McMAHON. To those who go down to the Interior Department today, after the passage of the pending bill and file a perfecting claim, no compensation will be paid for the material itself. In the case of those who have perfected claims on the public lands, the Commission would be empowered to make compensation for the material itself.

Mr. O'MAHONEY. Mr. President, I am talking about a specific class of claimants, namely, claimants who might possibly, for the purpose of acquiring private rights have utilized their access to secret information, and their access to a development which was made possible by the appropriation of billions of dollars of public funds. I cannot believe that the committee would leave the door open to such a raid upon the public domain and upon the Public Treasury. Not that it may have happened; I have no reason to believe that it ever did happen, but certainly the door should not be left open.

Mr. JOHNSON of Colorado. Mr. President, will the Senator from Connecticut yield?

Mr. McMAHON. I yield.

Mr. JOHNSON of Colorado. The Senator will discover, if he reads carefully the provisions of the bill, that the Government itself has a complete monopoly of all fissionable materials.

Mr. McMAHON. All source materials, as well as of fissionable materials.

Mr. JOHNSON of Colorado. All source materials. Of course, we could not do violence, and did not care to do violence, to anyone who had a claim on the public domain, but he cannot market, really, any of this material. There is only one market, and he has to take the price that is offered him by the United States Government.

Mr. O'MAHONEY. I submit that the Senator does not concentrate his attention upon the point I am asking. I have

no desire to deprive a person who in good faith made a location upon the public domain of the right to complete the location, provided such a person was not in privity with the atomic project. I think any person who was in privity with the atomic project should not be entitled to any benefit whatsoever.

My thought is, Mr. President, that there should be added at the appropriate place an amendment which would read something like this:

Provided, however, That no person, corporation, partnership, or association which had any part, directly or indirectly, in the development of the atomic bomb project, may benefit by any location upon the public domain taken after such person took part in the project.

Mr. JOHNSON of Colorado. Mr. President, the amendment which the Senator proposes is not necessary at all because there has been no occasion of that kind. No corporation or person, up to the present moment, has made one red cent out of the mining of uranium ore.

Mr. O'MAHONEY. I am not talking about what may have been done in the past; I am talking about what may be done in the future. I know that the air was full of rumors of efforts upon the part of some who were in privity with the project to obtain rights upon the public domain. Whether there is any basis for those rumors, I know not, but certainly the amendment which I now suggest would harm no person who was in good faith. It would deprive no bona fide locator of any right, and it certainly would not be disadvantageous to the Government.

I suggest that the committee accept the amendment and take it to conference, so that the matter may be surveyed.

Mr. JOHNSON of Colorado. Will the Senator yield to me for a moment?

Mr. McMAHON. I yield.

Mr. JOHNSON of Colorado. The holder of such a claim as the Senator described cannot make any profit out of it. He has to sell all the source material to the Government at the Government's price.

Mr. O'MAHONEY. What of it?

Mr. JOHNSON of Colorado. Who is going to make any "killing" on that kind of a proposition? It simply is not within the provisions of the bill for anyone to make a profit.

Mr. O'MAHONEY. Mr. President, all I know about the bill is what I have read in the report, at which I just glanced, and in the print which appears before us, on page 43, I find this language:

All uranium, thorium, and all other materials determined pursuant to paragraph (1) of this subsection to be peculiarly essential to the production of fissionable material, contained, in whatever concentration, in deposits in the public lands are hereby reserved for the use of the United States; except that with respect to any location, entry, or settlement made prior to the date of enactment of this act no reservation shall be deemed to have been made—

Mr. JOHNSON of Colorado. "If."

Mr. O'MAHONEY. Mr. President, I think, perhaps, rather than by the proposed amendment I dictated while extemporaneously talking about the mat-

ter, the idea I have in mind would be much better by striking out the words "prior to the date of enactment of this act", and substituting in lieu thereof "prior to the date of the beginning of any Government experimentations for the development of the atomic bomb."

Mr. JOHNSON of Colorado. The Senator did not finish the sentence he was reading.

Mr. O'MAHONEY. Very well, I shall finish it.

Mr. JOHNSON of Colorado. Beginning with the word "if" in line 13, I wish the Senator would proceed.

Mr. O'MAHONEY. I read:

Shall be deemed to have been made, if such reservation would deprive any person of any existing or inchoate rights or privileges to which he would otherwise be entitled or would otherwise enjoy.

In other words, at any time from now on until the bill is signed a right may be asserted, and by this language it is protected, no matter by whom the right is claimed. It may be made by any person who participated in the atomic-bomb project. Certainly, Mr. President, it is not the intention of the committee to grant such a wide-open opportunity for the exploitation of the public domain. I certainly hope the amendment which I have suggested will be accepted by the committee and taken to conference.

Mr. JOHNSON of Colorado. I wish the Senator would proceed and read at the bottom of page 43, beginning with the word "any"; I wish he would read that language in connection with the language which he has just read.

Mr. O'MAHONEY. Very well.

The Secretary of the Interior—

Mr. JOHNSON of Colorado. No; begin with the word "any", at the bottom of page 43, in line 25.

Mr. O'MAHONEY. Let me read the prior sentence so we may all understand the connection.

Mr. JOHNSON of Colorado. Very well.

Mr. O'MAHONEY:

The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources, under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby.

Mr. President, the reading of that sentence to my mind only increases the confusion and proves emphatically the necessity for writing into the bill such an amendment as I suggest.

Mr. JOHNSON of Colorado. The last sentence the Senator read pertains to land which will be filed upon after the passage of this measure.

Mr. O'MAHONEY. Not at all. It does not say that. It merely says "in every patent, conveyance, lease, permit, or other authorization hereafter granted."

Mr. JOHNSON of Colorado. Yes; "hereafter granted."

Mr. O'MAHONEY. Certainly. But the rights which have accrued by allocation heretofore are exempted from that

provision, or else there is no meaning in language. By this language a lawsuit is being created.

Mr. JOHNSON of Colorado. Will the Senator proceed and read the rest of the paragraph, beginning with the word "any."

Mr. O'MAHONEY. What I am unable to understand, Mr. President, is why the Senator resists a perfectly simple amendment that can cause no trouble to any person who has acted in good faith. All in the world I want to do is to close the door to a possible wrong, and certainly no member of the committee can take the position that it is the desire of the committee to permit any person who had any part whatsoever in this tremendous public expenditure for the development of fissionable materials to assert and maintain any claim upon the public domain to deposits of such materials.

Mr. JOHNSON of Colorado. While I have no objection to the Senator's amendment, I do not think it is at all necessary. I do not think it will add anything to the monopoly which the Government already possesses of the source materials, and the only fear I have of his amendment is that it may complicate other matters.

Mr. O'MAHONEY. I can see no possibility of it complicating anybody or anything, because all it does it to say that a person who was in privity with this great project shall not gain any advantage thereby. That is a fundamental principle of ethical conduct. If the amendment which I have hastily drafted—I do not want to ask the Senate to delay consideration of the bill—is not sufficient, or if it is too much, it can be perfected in conference. The bill has to go to the House. Now let it go out of the Senate with a clear implication that we do not want to open the door to abuses.

Mr. MILLIKIN. Mr. President, will the Senator yield?

Mr. McMAHON. I yield to the Senator from Colorado.

Mr. MILLIKIN. If I understand the purport of the distinguished Senator's suggested amendment, it might put the Congress in the position of retroactively destroying the rights which the Senator knows a man who has made a valid location comes into even against the United States Government. If there is a fraudulent location, no matter by whom made, then the law has many remedies for vacating such a location. If the location is not fraudulent I know of no way whereby we can retroactively exclude a man from those rights which he gets even against the United States Government if he has made a valid location and has done the other things required by law to be done.

Mr. O'MAHONEY. Of course the Senator is quite correct. I have no desire to block any such person, but I do have a desire to say in language that cannot be misunderstood that any person who benefitted by the tremendous expenditure of public funds, by the activities of scientists which were carried on in a patriotic effort to defend the Nation, shall be in a position to make a claim after he acquired secret Government information. It seems to me out-

rageous, Mr. President, that such a possibility should be encouraged.

Mr. MILLIKIN. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. MILLIKIN. I most respectfully suggest that, it seems to me, if a valid location has been made we can not upset it by retroactively declaring that because a man has been engaged in atomic energy work his location, because of that fact, retroactively has become fraudulent. I earnestly suggest to the distinguished Senator from Wyoming, who is so well acquainted with our western mining law, that that is something which would not be warranted.

Mr. O'MAHONEY. Mr. President, the Government of the United States made an appropriation and placed it under the highly secret custody of the President of the United States to be expended for the purpose of smashing the atom and developing the atom bomb so as to protect the very life of the Nation. That having been done, the scientists of the Nation, and of the world in some instances, were brought into an organization to search the country for deposits of fissionable material. Now shall we say that the mining law, which was intended to protect prospectors upon the public domain, shall be so interpreted as to permit those who were brought into this project by the Government of the United States in defense of its life to assert title to the public domain?

Mr. President, it seems to me that the question answers itself. I hope the committee will accept the amendment which I originally suggested, and take it to conference. Let us consider this question. Let us put the flashlight of public opinion on it. I cannot understand why the amendment should be resisted. If no wrong has been done, no one will be injured. If no advantage has been taken of the Government and of the private and secret knowledge, no one will be harmed. The amendment which I suggest has only one purpose. It is to protect the public domain of the United States from exploitation by those who, having participated in this project, may have attempted to go out upon the public domain and acquire rights.

Mr. MILLIKIN. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. MILLIKIN. I should like to suggest to the distinguished Senator from Wyoming that there has been no secret about the growing value of fissionable materials. In Colorado the humble man who has taken up a claim and developed such materials has been able to sell them for the first time and obtain money for them. He proceeds on his own expectations that a certain ore will be profitable if he can find it, and he locates his claims accordingly. I do not know of any facts which would sustain the fear of the distinguished Senator from Wyoming. What I am afraid of is this: I do not believe that we can now say that anyone who has made a valid location under the existing standards at the time he made it can be deprived of the location because he may have had inside information that such a location, if he could find the ore, might be valuable. I appeal to the Sen-

ator's wide experience in such matters, and suggest that we would be doing something that is not sound.

Mr. O'MAHONEY. The Senator has answered himself. I say without any reservation whatsoever that no person having inside information—to use the phrase of the Senator from Colorado—should be permitted to profit by such inside information, since he secured it as the result of the appropriation of billions of dollars from the Treasury of the United States.

Mr. MILLIKIN. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. MILLIKIN. Every mining prospector in Colorado who has produced fissionable material has benefited through the expenditure of Government money for fissionable materials, and they have all acted on the expectation of profit.

Mr. HICKENLOOPER. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. HICKENLOOPER. I further suggest to the Senator from Colorado that most of them acted as employees, in one capacity or another, of the Manhattan project. Prospectors were prospecting for these materials all over the West, financed, in many instances, as I understand, by the Manhattan project itself. We would deprive those men of their livelihood.

If the Senator will further yield, I should like to suggest another phase. Are we to say to the atomic scientist, in a hastily drawn amendment applying to this particular subject, that as a professor in a university in years to come he may not use the information which he gained in the laboratory? Are we to say to the engineer who worked on the Manhattan project or the Hanford project, "You may not, as an employee of private industry, use the engineering techniques which were developed at Government expense, and which form a part of your knowledge and capabilities"? Are we to say to persons who heretofore have validly, and without fraud, as suggested by the Senator from Colorado, located properties in connection with their business, in which some uranium may be found, "We are going to enact a retroactive statute destroying existing legitimate property rights"? I do not believe we can, unless we want to go into the brain of the scientist and deal with the handiwork of the engineer and say to him, "You may not use any of your engineering training or any of the education you have obtained in the Manhattan project, simply because you have obtained that information at Government expense and as a part of the war effort."

I believe that a broad principle is involved, which we should consider very carefully. I am convinced that under the terms of the bill the ownership of this metal and the control over the metal is so reserved in the Government that I do not see how in the world any company or individual could make a really worthwhile profit from the discovery or transfer of uranium.

Mr. McMAHON. I may say to the Senator from Wyoming that I am no more anxious than he is, or than anyone else is, that anyone should profit at the ex-

pense of the Government of the United States by taking undue advantage of a holding of public land. However, I invite the Senator's attention to the fact that if X corporation, which has been supplying uranium to the Manhattan project, extended its claims on the public lands for the purpose of obtaining more uranium to sell to the Government, it would not profit to any appreciable or measurable extent, because the Senator will see in section 5, on page 42, that the Commission sets the price. The Commission is the sole effective possible buyer. If X company were not to take the price set by the only purchaser in America, the Government, which price would be based on the work of getting the material out of the ground, it would not be able to profit very greatly under the situation which the Senator has described.

Mr. O'MAHONEY. Why permit the person who had inside information to acquire the title?

What the Senator from Iowa has said in attempting to compare the situation which I have described with that of a scientist is utterly without basis. Of course there is no analogy whatever. I use again the phrase used by the junior Senator from Colorado—"inside information." I suggest that if the language which has been reported by the committee is intended to mean what the junior Senator from Colorado says it ought to mean, this is the way it ought to read:

Except that with respect to any location, entry, or settlement, made prior to the date of enactment of this act no reservation shall be deemed to have been made, if such reservation would deprive any person, whether or not he was acting as an agent of the Government of the United States, whether or not he had inside information derived from an appropriation made by the Congress of the United States, of any existing or inchoate rights or privileges which he may have asserted after he became associated with the atomic project.

The absurdity of such a position is so apparent that I am utterly unable to understand why the members of the committee resist the suggested amendment.

Mr. JOHNSON of Colorado. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. JOHNSON of Colorado. I should like to ask the Senator from Wyoming if he has a proviso which he wishes to insert after the word "enjoy" in line 15. Would he state his amendment in the form of a proviso, and what would the language of the proviso be?

Mr. O'MAHONEY. As I stated to the Senator, I dictated a suggested amendment on the floor. Perhaps the official reporter who took down the amendment will come back and reread it. I would insert it precisely at that point.

Mr. JOHNSON of Colorado. I am sure that the committee would not resist such a proviso.

Mr. O'MAHONEY. It would be inserted on page 43, line 15, after the word "enjoy."

Mr. McMAHON. Would it not be possible to repeat, after the word "enjoy" language similar to that which appears in line 18, on page 44? It would then read:

If such reservation would deprive any person of any existing or inchoate rights or

privileges to which he would otherwise be entitled or would otherwise enjoy: *Provided, however,* That no payment made for source materials, as defined in this act, shall include any amount on account of the value of such material before removal from its place of deposit in nature.

Mr. O'MAHONEY. The Senator suggests an amendment which does not deal with the point I have in mind. At that point in the bill it would not cover the defect to which I am referring.

I invite the attention of the committee to the fact that at the beginning of subparagraph (7) on page 43 there is an express and complete declaration of a reservation to the United States of all fissionable deposits. That is followed by an exception. The deposits which are covered by the exception are not reserved to the United States. My only suggestion is that there be withdrawn from that exception all claims and locations of whatever kind or character which might be made by those who were in privity with the atomic-bomb project.

Mr. McMAHON. What is the Senator's specific suggestion?

Mr. O'MAHONEY. I have sent to the official reporters for the language which I dictated. It has not come back.

Mr. McMAHON. I myself see no objection to it. However, I wish to emphasize to the Senator the fact—

Mr. O'MAHONEY. I know that in this bill the committee has exercised every care to protect the rights of the Government. I have the highest admiration for the committee and for the great work it has done.

Mr. McMAHON. I thank the Senator very much; but I am not now engaged in distributing orchids either to myself or to any other members of the committee. I merely wish to point out to the Senator that the so-called chance for great profit which is at the heart and root of what the Senator is pointing out is illusory.

Mr. O'MAHONEY. There is nothing illusory about it, if I may reply to the Senator, because what we are doing here is granting away a title to the public domain. The law which is proposed here may be amended next year. It may be changed in many particulars. The limitations upon profit may be withdrawn. But the title will still be given away.

The official reporters have now furnished a copy of the suggested amendment which I stated. It would be to add, in line 15, on page 43, after the word "enjoy" the following proviso:

Provided, however, That no person, corporation, partnership, or association which had any part, directly or indirectly, in the development of the atomic bomb project may benefit by any location, entry, or settlement upon the public domain made after such person, corporation, partnership, or association took part in such project.

Mr. CORDON. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. CORDON. I should like to inquire of the Senator from Wyoming, if I may, whether he believes that the Government of the United States can, by statute, take property rights created by a valid and subsisting mining location on the public domain?

Mr. O'MAHONEY. Mr. President, I do not believe that a mining location made under the circumstances which I have described would be a valid mining claim which should be supported. Therefore the suggestion of this amendment is to eliminate law suits. Let us close the door. Let us take this amendment to conference, as I have said over and over again.

The point I make, Mr. President, is simply that where the people of the United States have spent billions of dollars of public money subscribed by the people of the United States who bought the bonds and paid the taxes to develop this program and to develop this project, and where by reason of that expenditure they sent their agents out upon the public domain—I say “their agents”; they are the agents of the people of the United States—then I say that as to those agents, those possessors of inside information, as the Senator from Colorado has so aptly termed them, nothing we write into this bill should undertake to protect them in obtaining title to the public domain.

Mr. McMAHON. Mr. President, let me say to the Senator that there is no member of the committee who wants any unfair advantage to accrue to anyone who took part in the Manhattan project. Neither do we want any unfair penalties to be applied.

The argument the Senator makes which appeals most to me is that he has offered a suggestion which he believes is necessary to safeguard the public interest. Perhaps the suggestion is a good one; perhaps it is not. Personally, I should like to study it further. I should be quite willing, personally, to accept the amendment, so that we can study it further and talk it over with the Senator when we get into conference on the bill.

Mr. O'MAHONEY. That is precisely what I am suggesting.

Mr. MILLIKIN. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. MILLIKIN. I should like to make my position a little clearer. I am in accord with every ethical sentiment the Senator from Wyoming has expressed.

Mr. O'MAHONEY. I am sure of that.

Mr. MILLIKIN. I would no more go in the face of those sentiments than either of us would go in the face of the Ten Commandments.

My point is simply that we cannot retroactively attach the quality of fraud to something that was not fraudulent. If at the time of the location of a claim, locating it by inside information, under the circumstances described by the Senator, was fraudulent, then the claim is fraudulent without our saying anything about it. If it was not fraudulent, there is nothing we can say about it now that would make it fraudulent then.

Mr. O'MAHONEY. Mr. President, I will say to the Senator from Colorado that in the history of the development of the West, many a claim jumper paid for taking advantage of inside information by dangling at the end of a rope or standing before a pistol in the hands of an outraged principal.

Mr. GURNEY. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. GURNEY. At the time when the Senate temporarily laid aside the selective-service bill, which had been made the unfinished business for consideration today, there was something of an agreement that consideration of the atomic-energy bill would take only a certain length of time. That time has passed, I may say, and we still have to consider today the agricultural appropriations bill.

So I suggest now that it might be proper to set aside temporarily the pending bill, when those who are most interested could get together on an amendment which they could later, after consideration of the agricultural appropriation bill is concluded, submit for the concurrence of the entire Senate. I make that suggestion in good faith, because the original agreement was, I am sure, entered into in good faith by all of us.

Mr. McMAHON. I say to the Senator from South Dakota that I think we are fairly near a final vote on the bill; I believe it will take only a few minutes more.

If the Senator from Colorado will concur in the suggestion I made to the Senator from Wyoming, I think we could adopt it.

Mr. MILLIKIN. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. MILLIKIN. I think it is of the utmost importance, almost of vital importance, that this bill pass the Senate promptly and go to the House of Representatives and be passed by the House of Representatives and become the law. I understand, and I do not think we should violate the agreement which permitted the Senate to consider this bill at this time. It is my opinion that if we do not pass the bill on this occasion we probably shall not pass it prior to the summer recess of Congress.

So, merely to get it out of the way, and although I am in complete disagreement with the theory of the Senator from Wyoming, but not with the ethics involved, I am willing to accept the proviso in the hope that the conference will eliminate the amendment, so that we may not have a new crop of litigation, which we hope to avoid by this bill.

Mr. McMAHON. I thank the Senator.

Mr. MURDOCK. Mr. President, will the Senator yield to me?

Mr. McMAHON. I yield.

Mr. MURDOCK. I think the matter is too important to pass over hurriedly. In my opinion, the Senate of the United States simply should not, for the sake of expediency, adopt an amendment which would be retroactive as to vested rights.

I agree largely with what the Senator from Wyoming has said; but when rights are vested under any law of the United States, as they have been vested, according to the statement of the Senator from Wyoming, then how can we, as the Senator from Colorado has well pointed out, by statute do anything about them? I am a little surprised that any Senator would ask, for the sake of expediency or anything else, that the Senate put its stamp of approval upon that type of legislation.

Mr. McMAHON. Mr. President, I should like to answer the Senator from

Utah, if I may, with the permission of the proponent of the amendment, by saying that if the theory of the Senator from Wyoming is correct, namely, that as a result of the acquisition of inside information persons went out on the public lands and filed claims for future use and for future development I do not think that with regard to the legalities of the situation we are doing any violence to the laws based on ethics as to the amount of profit which such a proponent of a claim may have.

Mr. MURDOCK. Mr. President, I will say to the Senator that we may have a perfect right, so far as fissionable material is concerned, to reach out and take it when it becomes personal property of the miner who has located the claim. But if we take the position today that we can retroactively destroy a vested title or a vested possessory right merely for the sake of expediency, then we can do it on any occasion for the sake of expediency. Mr. President, I simply do not believe the Senate of the United States should engage in that type of legislation, regardless of ethics or anything else.

Mr. FERGUSON and other Senators addressed the Chair.

The PRESIDING OFFICER. Does the Senator from Connecticut yield; and, if so, to whom?

Mr. McMAHON. I yield first to the Senator from Michigan.

Mr. FERGUSON. Mr. President, it appears to me that we should take a little more time and should devote a little more attention to the problem now before the Senate; namely, this amendment. I agree wholeheartedly that if any person, corporation, partnership, or association by fraud has acquired land or property rights in our public domain, we have the power, under this amendment, to take those rights from him. If one has committed a fraud upon the Government by entering upon the public domain and obtaining rights, he should not be entitled to them. If he has, however, at the time he acquired his rights obtained them legally under the law, we should not attempt to take them away without due process of law. We cannot by the adoption of this amendment take away such rights legally acquired merely because the person who acquired them was an employee. To do so would be taking private property without just compensation in violation of the fifth amendment of the Constitution which provides, in part, “nor shall private property be taken for public use, without just compensation.”

This bill could not take away legally vested rights without just compensation, and what is just compensation is a judicial and not a legislative question.

Mr. McMAHON. Mr. President, I am sorry that I cannot yield any further time to the Senator. I am working under a limitation of time.

Mr. HATCH. Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. The Senator will state it.

Mr. HATCH. Was a unanimous consent reached limiting the time of speakers?

The PRESIDING OFFICER. No such unanimous-consent agreement has been reached.

Mr. McMAHON. There was, however, a statement on behalf of the senior Senator from Michigan and myself to the majority leader, and to the Senator from South Dakota, and the Senator from Georgia, to the effect that we believed we would be able to conclude action on the bill within 2 hours. I ask unanimous consent that we have until 3 o'clock to discuss further the matter and see if we cannot come to a conclusion.

Mr. RUSSELL. Mr. President, I am willing to withhold any demand for the regular order until 3 o'clock, but if we cannot reach a vote on the bill by then, I shall demand the regular order so that I may be in position to move that the Senate take up and consider the agricultural appropriation bill.

Mr. JOHNSON of Colorado. Mr. President, will the Senator yield?

Mr. McMAHON. I yield.

Mr. JOHNSON of Colorado. Mr. President, I have tried to consider the amendment offered by the Senator from Wyoming [Mr. O'MAHONEY] within the few minutes at my disposal. I see no harm in the amendment, because there simply is no such case as he describes. He is trying to cover what is only a theory. Therefore, I see no harm in accepting the amendment and allowing it to go to conference. I agree wholeheartedly with what my colleague has said, and with what has been said by the Senator from Michigan. But inasmuch as the amendment is entirely harmless, I see no reason why it should not be agreed to.

The PRESIDING OFFICER. Will the Senator from Connecticut state whether or not the committee accepts the amendment which has been offered by the Senator from Wyoming [Mr. O'MAHONEY]?

Mr. McMAHON. We accept the amendment.

Mr. O'MAHONEY. I thank the Senator.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from Wyoming [Mr. O'MAHONEY].

The amendment was agreed to.

(The explanation of Senate bill 1717, for the development and control of atomic energy, submitted by Mr. McMAHON, and ordered to be printed in the RECORD at the close of the debate on the bill, is as follows:)

Mr. President, in delivering my remarks on the pending bill, I would appreciate being permitted to proceed without interruption until I conclude. I ask this because the bill under discussion deals with a subject which is not only new but extremely technical and difficult. In addition, the bill is so much of one piece that the significance of its various parts may be apparent only in the light of the whole and, therefore, can be explained clearly if I am permitted to describe the whole bill, without stopping to answer questions. If the Senators have any questions when I get through, I shall be glad to answer them to the best of my ability.

THE PROBLEM

Mr. President, on August 6, 1945, a single American plane flew over Hiroshima, in Japan, and dropped a single American-made bomb. That bomb destroyed the city, knocked Japan out of the war, and served notice on the world that science had at last harnessed "the basic power of the universe" and made available to man the giant force

of atomic energy—for good or for evil. In war it had given us the most fearful of weapons. In peace it might bring us greater freedom than we had dared dream of before—greater freedom from toil, from hunger, and from disease.

In the blinding flash of that bomb men saw the birth of a new era in the history of civilization. When the smoke and the dust had settled over the rubble men discerned in the red sky above the ruins the shape of a huge question mark: What can be done to control this powerful giant of the split personality?

Today, almost a year later, this problem is still with us. In the light of its importance, all other problems seem insignificant, for on our answer depends not only whether we go on living, but more importantly, whether or not we have any civilization to hand down to our children and our children's children.

It is now, in the infancy of the atomic age, that the form of the future will be shaped. It is now, before the atomic fire grows too hot, that we can make the mold and pour the steel which will harden into set patterns of thought and behavior. It is now while the age of atomic power stretches before us, like an undeveloped continent, that we can still set our compass by the light of human intelligence and decide in which directions humanity will travel.

Although the problem of controlling the use of atomic energy is one which fronts the whole world, it is particularly an American problem for we wrought it and we were the first to use it. The responsibility may be great, but thank God that responsibility is ours and not that of our recent military adversaries.

In the light of that responsibility this body established a special committee, sent it out to study the problem, and instructed it to return with some answers. That committee is now reporting back. It has studied the problems and it is providing the best answer it is capable of giving. It is unanimously recommending the immediate passage of S. 1717, as amended in committee.

COMMITTEE WORK

Mr. President, your committee did not take its task lightly. Impressed with the gravity and the magnitude of the job to be done, it labored long and arduously at the task assigned to it by the Senate.

In acquiring a background of information and in the consideration of legislation, the committee met in almost daily session from November 27, 1945, through April 11, 1946. It listened to well over a million words of testimony in open and executive sessions from more than 100 witnesses. In conformity with the democratic process, it also gave consideration to points of view expressed by citizens and their organizations in more than 70,000 letters, telegrams, petitions, and resolutions which were addressed directly to the committee, in addition to those sent to its individual members.

Instead of beginning its work with consideration of specific legislation, the committee held public hearings of a general nature in order to acquire the scientific background and the basic technical facts necessary to an understanding of the problems involved. In a procedure which has been described as "unique in the history of Congress," committee members literally went to school to the only people who knew the answers—the men who had split the atom, released atomic energy and made the atomic bomb—the scientists. Perhaps never in the history of education have pupils gone to school to a more distinguished and more cooperative faculty, for the men of science had looked upon their handiwork, they were filled with fear, and they wanted us to understand why.

As they taught us what they knew, as they revealed to us what they had done, their fear communicated itself to us, too. "There

are men living," we were told by Dr. Edward U. Condon, Director of the National Bureau of Standards and scientific adviser to the committee, "who know how to make a single bomb as destructive as 1,000,000 10-ton blockbusters. One such bomb, dropped on Washington or any other major city, may be expected to destroy its buildings utterly and wipe out its population."

In consideration of such testimony, and the testimony of scientific and military experts who had carefully measured what was left of the atomized cities of Japan, we would have been less than human had we failed to extend our imaginations from Hiroshima to Hartford, from Nagasaki to New York.

Nor could we find any comfort in the knowledge that the monopoly we now hold in the production of atomic weapons is precarious and certain to be short-lived. But most alarming of all was the conviction brought home to us by the scientists, and confirmed by our military witnesses, that there is no real military defense against the atomic bomb, nor is any defense in sight.

Having bombs of our own may give us the satisfaction of knowing that if some other nation wipes out our cities, we can wipe out theirs. That may be a grim sort of satisfaction, but it is not security.

The words of the great blind poet of Paradise Lost became meaningful for us:

"What if the breath that kindled those grim fires,
Awaked, should blow them into sevenfold
rage,
And plunge us in the flames?"

Mr. President, when there is no military defense against a military weapon, then men must look elsewhere for their safety. The more we studied the problem the more it became obvious that our true security must rest on a much broader foundation than purely military might.

To be secure we need economic and industrial strength.

To be secure we need scientific advancement and achievement.

To be secure we need a people strong, healthy, and prosperous in the enjoyment of the fruits of such achievement.

To be secure we need a people whose patriotic fiber is fortified through constant reinforcement of their traditional forms of civilian government and their free institutions.

To be secure we need an international control strong enough and effective enough to keep war out of the world, entirely.

As the mass of evidence accumulated before the committee, it became apparent to us that our need for security in this dangerous age of atomic weapons, and our desire as a people to share in the benefits which atomic energy might bring to our daily lives, were not antithetic but, on the contrary, were collateral.

Our desire to put the powerful giant of atomic energy to work for the common good grew more and more impatient with the realization that we now have in our hands keys to health and plenty in a world that is rife with disease and starvation. How could we stop our ears to the cries of agony all around us, knowing that every day of delay in deciding what to do about the uses of atomic energy is a needless prolongation of human suffering in our own land and across the face of the earth? Last year one of every nine of all the men and women who died in the United States, died of cancer. This terrible scourge takes a toll year by year far in excess of the worst of our military casualties. In 1943, we had five times as many deaths from cancer as from combat. Yet the scientists tell us that radioactive iodine can be used to treat thyroid cancer, that radioactive strontium can treat bone tumors and that phosphorus made radioactive is a specific for leukemia.

We know that the availability of cheap radioactive materials makes them a promising research tool in fields of medicine, biology, chemistry, metallurgy, botany, and other sciences, as well as in industrial applications of these sciences.

The scientists assured us, too, that radioactivity can be used, in conjunction with detecting instruments, to map underground oil pools, to speed industrial analysis of metals in steel plants or refineries, to replace expensive X-ray apparatus in the analysis or testing of large metal pieces, to trace a specific molecule through a chemical reaction, to investigate the complex structure and properties of organic chemicals, to discover how therapeutic drugs work, to study plant growth and photosynthesis, to follow a liquid through a maze of pipes, to trace the course of underground water, and in a host of other applications.

The possibilities of this new energy as a source of power are tremendous. The heat released from time to time during the operations at Hanford, Wash., raised perceptibly the temperature of the Columbia River. What could this kind of energy, properly harnessed, do for us in our daily lives, in the heating and lighting of our cities, in running engines and turbines? What could it do, this energy-releasing uranium, this portable, packaged source of power, if it were introduced in those rich and remote regions of the earth now far removed from sources of power? The possibilities are almost beyond imagination, but the scientists assured our committee, they will certainly come to pass within our own lifetimes if free development in atomic energy is able to continue.

Knowing all this health and wealth and happiness for our people is at our fingertips, I ask you, Mr. President, how could we do otherwise than apply ourselves with vigor and determination to the devising of the controls which will release this flood of God-given goodness to a world in dire need?

It was indeed fortunate in the framing of such controls through the writing of this bill, that the means to greatest national security coincided so largely with the desire of the committee to foster and promote research and development for the benefit of all the people. The scientific advancement which will give us these benefits, will also make us strong and secure.

In this day and age the thing which will bring us the greatest measure of security is to give our scientists the green light. To have them move forward, advancing the endless frontiers of science, developing new sources of power, and new ways of using power. To help them in every possible way to keep for America the lead we now have in the race for knowledge, which is the only real source of power and the only real guarantee of freedom. For today, as in the time of our Lord, the road to freedom is illuminated by the words: "And ye shall know the truth and the truth shall make you free." Today, more than ever, security is something dynamic.

In the final analysis, however, we can have complete and perfect security only in a world without war. And such a world can be brought about only through international cooperation and control among nations determined to preserve the peace.

Mr. President, as long ago as September 6, 1945, only 1 month after the bomb fell on Hiroshima, I publicly urged international control over atomic weapons. And I have found no reason since then for changing my mind. This bill, which you are being urged to enact into law, was specifically written to give maximum effect to policies agreed to by the United States and formulated by international agreement for the control of atomic energy.

Just what forms such international agreements should take it is not the function of this bill to determine, for it is confined entirely to domestic controls. However, to

avoid any future conflict between domestic and international controls the bill provides for future changes and makes agreements automatically become void.

The committee's studies made it apparent that domestic legislation would have to be provided which did three things:

First. Give the country the greatest security.

Secondly, make available to the people the benefits of atomic science and its applications.

And, thirdly, promote and facilitate international cooperation for the control of atomic energy.

Mr. President, it is my sincere conviction that S. 1717, as amended and as unanimously approved by the committee, accomplishes the job which needs to be done. It does this, in the opinion of the committee, in the most efficient, most effective, and most far-sighted manner possible.

I would now like to examine the bill in the light of these objectives.

I turn first to a consideration of the powers granted the organization set up in this bill. Throughout my consideration I beg the Senators never for a moment to forget that these legal powers are being granted to equip a strong organization for controlling a physical power that can remake or destroy the world.

POWER TO CONTROL

This bill takes strong measures to protect us against a great menace. First of all, it prohibits any private ownership of the explosive material in an atomic bomb, the so-called "fissionable" material. It absolutely prohibits export of such material and prohibits its import by private persons. It prohibits private ownership of facilities producing this material. It prohibits private patents on production processes or on military devices using atomic energy. It prohibits unauthorized dissemination of information regarding production processes or regarding uses of atomic energy that have military importance. The production and ownership of this explosive material is to rest exclusively in the Atomic Energy Commission established in this bill. The Commission is to hold all patents on production processes and on military devices, paying just compensation to inventors and patent owners. The Commission alone is permitted to release information from the restricted category set up in the bill and to permit its free dissemination.

In approving this bill our committee agreed unanimously on the powers granted. They are the minimum powers necessary to protect this Nation, this city, this building itself against an atomic bomb manufactured within our own borders, or from the misuse of information or material in our possession.

Is there anyone among you who will contend that the times are now so propitious, the world so well-intentioned, and America so supremely secure that we can permit any Tom, Dick, or Harry to play ball with the stuff annihilation is made of? When a push button may destroy a city can we afford to leave such buttons in private hands? If not, then we cannot allow private persons to own the facilities for producing fissionable material.

Would you allow anyone to own the rights to an atomic weapon now?

This bill prevents anyone from holding patents on the explosive material in atomic weapons.

Would you spread before the world the blueprints of the atomic bomb now?

This bill keeps military information secret until its release can no longer injure our national security.

Furthermore, by providing that only the Atomic Energy Commission shall own and operate the plants producing fissionable material and atomic bombs, the bill insures that current production processes are known

intimately only by Government workers or by the employees of firms under direct Government contract.

Even if these provisions occasioned financial loss to many private persons, even if their enforcement required the confiscation of extensive properties, mortal danger would still provide the grim necessity for their enactment. In fact, however, these provisions simply extend powers already held by the Government and they continue a legal situation which already exists.

Atomic energy was developed by the people's money, \$2,500,000,000 of it. The Government now owns all fissionable materials and the plants where these materials are made. The Government guards those plants and the technical information about them, as secrets of national importance. To maintain these rights of ownership and the essentials of these secrecy provisions under the Atomic Energy Commission does violence to no one. It is not merely a step toward the conversion of our atomic energy installations to peaceful purposes; it is a necessary measure to insure their continued development and operation for all purposes.

The contention which I made at the outset of this speech, that this bill provides first of all for the security of this Nation, would be a mere bundle of hollow words if these provisions were any less strong or less comprehensive. These provisions for a Government monopoly over the information, the patents and the productive facilities required for making fissionable material and over the material itself, the patent provisions and those controlling information, are inseparable from one another. They are made to support and reinforce one another. Together they constitute our only immediate defense.

If anyone should say to me, "Such controls are extensive," I will agree with him. But if he should say to me, "Such controls are more extensive than necessary," then I will be forced to conclude that he has not realized, or has forgotten, the power of the atomic bomb. And I would want to paste up on the inside of his brow, where his mind could always see it, the sobering slogan: "Remember Hiroshima!" And to this I would add that the atomic bomb of Hiroshima is but a model T version. The scientists who made the bomb testified before our committee that the atomic bomb of the future may be a thousand times more powerful, may kill or maim everyone within 5 miles of where it strikes, and may affect every building within 40 miles. So far as we know now, such a bomb has not yet been built, but the scientists tell us it is perfectly feasible.

I have said that S. 1717 provides, first of all, for the national security. I have shown how the bill contains the controls necessary to avert immediate and sudden catastrophe. But the committee in approving S. 1717 was not so short-sighted as to think that we can achieve security by stagnation. A Government monopoly protects us only from dangers within our own borders. But any nation in time can learn our secrets—if not from us, then from that same book of Nature from which we learned them. We can be secure only by everlasting progress. This bill provides the means for the continuous development of atomic energy in all its aspects and applications.

The Atomic Energy Commission, as organized in the bill, is perhaps, first of all, a production agency. It is the agency empowered to produce materials releasing atomic energy and to make them into military weapons, if needed. There is nothing unusual in this assignment of duties. In time of peace, and for the most part in wartime too, the task of production is a civilian job. Production has never been a military function, and it is not a job for which military men are well equipped. The Atomic Energy Commission will in this bill bear roughly the same relation to the Army and Navy's procurement

programs that any private industry—the steel, or the automotive industry, for instance—has always borne. It will receive orders for fissionable material and for atomic weapons from the Commander in Chief of the armed forces, the President; it will fill those orders; it will deliver on those orders as authorized by the President.

Like any good production agency, the Commission is also charged in its other divisions with research and development; it can devise new techniques of production; it can assist the armed forces in devising new weapons. Production and research in production, military work and research on military weapons are activities of the organization which complement and strengthen one another. The bill establishes a Division of Military Applications in which military research is to be carried on, but nothing in this bill prevents any other person or agency in the United States from developing new designs for atomic weapons. The Atomic Energy Commission is expressly directed, under section 3 of this bill, to encourage such research by grants of money and loans of facilities and equipment. The only restrictions on military work apply to the manufacture of atomic weapons and to the use and manufacture of atomic explosives.

FREEDOM OF RESEARCH

Mr. President, if our national security depended merely upon our progress in the military arts, if this bill could stand or fall on how well it protects and promotes this progress, if simple military strength had been all our committee was concerned with, our task would have been simple indeed and we would have reported a bill back to you months ago. For surely nothing that makes for military strength is lacking from the provisions I have been discussing.

But the fact is—and I cannot repeat it too often—this bill is not a good bill because of the precautions it takes, because of the controls it establishes, because of the limitations it places on free development of atomic energy. This bill is a good bill because of the freedom it allows and because of the encouragements it gives to this development. Let me read from section 1 of the bill:

"Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objectives of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

"(b) Purpose of act: It is the purpose of this act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

"(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

"(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

"(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment."

There follow the other programs of the bill directed toward assuring the national security through atomic-energy control. Throughout the bill, provision is made for independent work by private individuals and for encouragement of this work by the Commission. Let me mention a few sections where these features are most obvious.

Along with the organization's own research conducted under its division of research, the bill provides in section 3 for assistance of all sorts to the research of other Government agencies, of private academic institutions and industrial establishments. The Atomic Energy Commission is authorized and directed to give financial assistance and loans of equipment and facilities for such research. In the distribution of fissionable material under section 5, it is to give priority to applicants requiring this material in research.

DISSEMINATION OF INFORMATION

Providing a program for the control of scientific and technical information was one of the most difficult of the problems which came before the committee. We were faced with a dilemma: To provide, on the one hand, for our immediate military security, and, on the other hand, for the freedom necessary for scientific research and development on which our long-range national security depends.

It became apparent in the early stages of our work that existing legislation was inadequate to protect those secrets which all agreed should be safeguarded. Under the Espionage Act, an agent may be prosecuted for the transmittal of secret documents, but the transmittal of "information" as such is not limited by that act. Thus, according to the Attorney General's office, a foreign agent could receive or transmit top-secret information concerning the atomic bomb and not suffer any consequences.

Because of the immediacy of the problem and the changing nature of the types of information to be safeguarded, amending the Espionage Act was not the answer. Neither was it to be found in trying to draw, by legislation, a distinction between "basic scientific information" and "related technical information." It would be possible to empower the Commission to issue regulations on what information can and cannot be freely disseminated, but there were objections to this method; constitutional guaranties of free speech and press might be endangered; the Commission would be empowered to act arbitrarily and capriciously and a heavy burden would be placed on everyone to become familiar with all the changing regulations of the Commission.

How, then, could the problem be solved?

The committee became convinced that customary legislative devices could not suffice and only after much hard work was the solution evolved which would obviate all the difficulties I have mentioned.

Section 10 of the bill establishes certain categories of information which are designated as restricted data. Briefly, one who transmits or receives restricted data with intent to injure the United States or intent to give advantage to a foreign power will be subject to a penalty of not more than 20 years' imprisonment, \$20,000 fine, or both. One who transmits such information with reason to believe that his action will have such a consequence is subject to a penalty of not more than 10 years' imprisonment, \$10,000 fine, or both.

The Commission is empowered to withdraw, from time to time, any data which may be published without adversely affecting the common defense and security. Thus, the outside limits of the crime have been affirmatively established, placing everyone on notice as to what kinds of information are classified. It will then be a simple matter to find out whether any particular piece of information has been withdrawn from the restricted category. The Commission's withdrawal power can only reduce—it cannot enlarge—the scope of the crime.

Section 10 also establishes the Commission as the top authority in the Government with reference to what will or will not remain as restricted data, except in any case where a decision of the Commission concerning in-

formation is appealed by the Military Liaison Committee through the Secretary of War or Secretary of the Navy to the President.

Section 10 satisfies the needs of both military security and scientific progress and is consequently acceptable to military men and scientists alike.

FREE MINING PRIVILEGES

In section 5 of the bill, provision is made for the control of source materials, the uranium ores from which the fissionable material is made. This material is at the foundation of all atomic energy production. A supply of this material is indispensable to the Atomic Energy Commission's production program. To keep track of our supplies of this material and to prevent their export or diversion into unauthorized channels, S. 1717 requires that all transfers of source material be licensed by the Commission. To assure an adequate supply of source material for the Commission's production program, the bill enables the Commission to acquire stocks of this material or lands containing deposits of this material by purchase or through exercise of the right of eminent domain. Title to source materials on public lands is reserved to the Commission and the Commission is authorized to make investigations to determine the existence of deposits of this material on private property but is not authorized to explore on private property without the owner's consent. Thus far the bill goes—and no farther. There is no substantial interference in this bill with the rights of private mining interests. It is not the intent of the committee to authorize the Commission to engage in mining operations in competition with private mining activity unless such operations are necessary to insure to the Commission a supply of source materials adequate for carrying out its duties and responsibilities under the provisions of the bill. There is no discouragement to the individual private prospector who, as Senator MILLIKIN has reminded us, goes out with nothing else but "beans, bacon," and independence" and on whom the real burden of discovery of our mineral deposits has always rested.

FREEDOM OF INVENTION

There is a third great area in the development of atomic energy which this bill keeps free. This is the development of devices using atomic energy for peaceful purposes. There is no restriction in this bill on private invention.

Patent rights are preserved for invention and discoveries that will bring into our daily lives the wonderful benefits that atomic energy promises. Certain limitations are put on these patent rights, it is true. In particular, it is provided that the Congress shall have the opportunity to legislate before any economically revolutionary device is put on the market. This is only a sensible, necessary provision to protect our economic system against sudden upheaval. It is only a recognition of the revolutionary possibilities of atomic energy and the need to retain in times of sudden change the firm hand of congressional control.

It is provided, too, that where the patent monopoly of any device using fissionable material would be inimical to the purposes of this bill, the Atomic Energy Commission may make the device available by licenses to the general public, with payment of royalties to the patent owner. This provision constitutes no restriction on the operation of our system of private enterprise under free competition. It is necessary indeed to prevent monopoly and to promote free competition. It is necessary to make generally available, for example, devices using fissionable material in hospitals for the cure of cancer. Surely if one believes in the purposes of this act, he can raise no objections to patent provisions that are expressly designed to effectuate those purposes. The

important thing to remember is that this bill provides incentives to inventors in the form of financial rewards and wherever possible in the form of traditional patent rights. This bill puts no damper on that private inventive genius which has helped to make our country powerful and rich and which is one source of our future security and wealth.

Mr. President, I have taken considerable time in expounding the philosophy behind this bill—showing what it seeks to do and why. But I have as yet said nothing about the means to accomplish its aims—the instrument for doing the job. That instrument is the organization which this bill would bring into being. This organization is not only the most efficient and effective instrument for doing the job to be done—it is, in fact, part and parcel of the objectives of the bill. The committee, after months of study, could find no other way to protect national security, foster scientific advancement for a prosperous economy and promote international cooperation for control of atomic energy while at the same time preserving and strengthening our traditional forms and institutions of government.

Let me begin my explanation of this organizational structure by going at once to the very heart of it—the Atomic Energy Commission.

THE COMMISSION

To accomplish objectives as broad as these, in a field of human activity as new and complicated as atomic energy, to handle powers as extensive as required is a task demanding the full-time attention of wise, experienced and independent men. The committee, seeing the problem in this light, rejected all proposals for an Atomic Energy Commission which might become a conglomeration of part-time representatives of special groups. To make policies affecting our lives, our safety, and the whole shape and substance of our future demands constant attention to the whole problem of atomic energy in our society. This is no job for part-time executives or a single administrator, either in the Army or outside it, no matter how long may have been his practical engineering experience; how brilliant his recent success, or how complete his understanding of our atomic energy development in all its scientific, technological and administrative detail.

S. 1717 would give the principal responsibility for the control and development of atomic energy to a Commission of five civilians of unquestionable caliber appointed by the President, with the advice and consent of the Senate and responsible to the President and the Congress. These men would devote their complete time and attention to the responsibilities of their high position. They would serve at salaries comparable to those on the highest level of government. As a special precaution, it is provided that the President shall submit to the Senate the qualifications of nominees for these positions at the time that their names are submitted for confirmation.

This bill, in short, considers the making of American atomic policy more than a problem in science, in military technology, or in production techniques; it considers it primarily as a problem in statesmanship.

Under the Commissioners, the bill sets up an organization with two main purposes: the efficient execution of the Commission's policies and programs and the proper participation of other groups, military and scientific, that have legitimate interests and responsibility in the atomic energy field.

I would like now to explain these two aspects of the organization structure. They are fundamental in understanding how this bill provides for our national security without retarding unnecessarily the peaceful economic progress of the country or endangering our chances for a lasting peace.

GENERAL MANAGER

It is essential that the organization subordinate to the Commission be able to operate efficiently. It should operate, as any other organization in business or Government operates, under the administrative direction of one man, who has some independence and power in his office and is responsible for the faithful execution of policies. S. 1717 provides for a General Manager to be appointed by the President to carry out the plans and policies laid down by the Atomic Energy Commission.

This General Manager, it is expected, will have the same administrative authority over the plant, equipment, and employees of the organization that the head of any old-line Government department has where efficient administration is the administrator's real job.

FOUR DIVISIONS

The framework of the four divisions subordinate to the General Manager can be judged only in relation to the powers which the organization is to exercise and the problems it is expected to meet. These four divisions are Production, Engineering, Research, and Military Applications.

The Division of Production will carry out production programs—the running of plants and the provision of raw materials for this work.

Problems in the construction of new plants or redesign of existing plants or engineering problems related to industrial uses of atomic energy will come under the supervision of expert engineers of all kinds in the Division of Engineering. This work was set up in a separate division as the result of testimony in committee hearings on the experience of the Manhattan district project and the many unusual and difficult engineering problems involved.

The research programs of the organization itself are placed under the Division of Research, but this Division is given no power over private research and no responsibility for extending the many aids to private research provided for under the bill. These responsibilities are left with the Commission.

The military applications of atomic energy are set up in a Division of Military Applications. This Division is to carry on the development work on atomic weapons which the organization is directed to undertake, through not to the exclusion of the armed forces or of any person or agency.

These divisions were set up in the bill after a thorough study of the duties and anticipated problems of the organizations. They are designed to make the organization operate efficiently both in its immediate job of production and control and in its long-range task of developing both military and peacetime applications of atomic energy. They reflect clearly the intention of the bill to provide for both the military security and the peaceful progress of the United States.

I now turn to the other aspect of the organization's structure: The provisions for participation by skilled scientists and technicians and by the armed forces.

ADVISORY COMMITTEE

A General Advisory Committee is set up to be composed of nine civilians appointed by the President. They are to meet at least four times a year to advise and consult with the Commission on scientific and technical matters. There can be no doubt that this Committee will make it possible for scientists to participate in this work as a matter of right and will make it impossible for the Commission to go astray in its policies because of lack of scientific information.

MILITARY LIAISON

The Military Liaison Board is the principal avenue for military participation in the organization. This Board, to be composed of Army and Navy representatives appointed by

their department heads, is given power beyond the mere advisory power granted to the General Advisory Committee. The Commission is to advise and consult with the Military Liaison Committee on all matters relating to military applications of atomic energy. On any matter which the Committee believes relates to military applications it has the right to protest to the heads of the Departments of War and Navy. Upon their discretion these Department heads may carry the protest to the President for final decision.

Surely no fairer or more proper method could be devised for enabling the armed forces to guard its legitimate interests in the work of the Commission. Furthermore this bill permits the armed forces to carry on research on atomic weapons. Subject to the Commission's right to set up safety regulations and to its powers over the actual materials that release atomic energy, research on, but not the manufacture of, atomic weapons is left free and open to all. There is nothing in the bill to hinder the Army's and Navy's military research programs. The Military Liaison Committee is, however, limited strictly to matters of military applications of atomic energy. Lacking the dignity of Presidential appointment, it will at all times be subordinate to the civilian Commission on matters of general policy.

ORGANIZATION SUMMARY

Here then, Mr. President, is the outline of the organization that is to direct this most difficult and critical activity. It provides for an organization equipped to continue whatever production and engage in whatever military research the immediate security of this country requires; while advancing, at the same time, the scientific and technological work on which the long-run security and economic welfare of this country depend.

Mr. President, this is a strong organizational mechanism. It is designed for a heavy load and for difficult operations. It is designed to bear large powers and to work quickly and efficiently in complex and untried fields.

CONGRESSIONAL PARTICIPATION

Mr. President, this bill is written for changing and difficult times. Its main purpose is to strengthen our national security, and one of the ways in which it does this is by reinforcing our traditional institutions of government. It is in line with our traditions that the Congress should play a large part in such an enterprise as this bill contemplates. Nothing could be so necessary as that the Congress should have the means of watching over this new and powerful organization, to assist it with new laws when new laws are required, to assess its operations and alter its powers and structure when necessary, to be ready to adapt it continuously to changing circumstances.

Because of its importance, I have purposely left until now all discussion of the role of Congress in the operation of the atomic energy organization set up by this bill. Section 14 provides for the establishment of a joint congressional committee of 18 members. Nine Members of the Senate are to be appointed by the President of the Senate, and 9 Members of the House are to be appointed by the Speaker of the House of Representatives. In both cases no more than 5 of the committeemen are to be members of the same political party.

This joint committee is to make continuing studies of the activities of the Commission and of problems relating to the development, use, and control of atomic energy. All bills, resolutions, and other matters in the Senate or the House of Representatives relating to the Commission or to atomic energy are to be referred to this joint committee, which is to report back to Congress, by bill or otherwise, from time to time.

There is another provision in the bill for congressional action which I want to mention here. This is the provision in section 7 for congressional control of the licensing of atomic energy devices. It provides the means for a carefully planned and well-considered introduction of this new energy in its civilian uses into our economic system. Before any new use of atomic energy is permitted, the Atomic Energy Commission is to report to the Congress the probable effects of such an innovation on our economy and on our international position.

After making such a report the Commission must wait 90 days during which the Congress is in session before authorizing the innovation by licensing its manufacture or use. This provision looks into the future, to the time when new uses of atomic energy may make obsolete whole industries and create serious technological unemployment. The bill provides for the free development of industrial uses of atomic energy under private enterprise, with private patents, and a licensing system to prevent the evils of monopoly. But it provides that first the Congress shall be apprised of the full effects of such development and shall have the opportunity, either to let it move along freely or to guide it where its progress threatens to cause sudden hardship or widespread economic shock and suffering. Through these provisions, this bill preserves the prerogatives and the powers of the Congress and provides the means for their wise and effective employment.

Mr. President, I have told you about the powers contained in this bill. I have explained the organization which this bill sets up and I have described how, in the preservation of our traditional forms, provision is made for the active participation of the Congress in the development and control of atomic energy.

Now, there is just one more point I would like to make and I will touch on it only briefly because of the length of my remarks. I want to point out that this bill looks hopefully forward to the day when, through international agreement, or by other means, the magnificent power of atomic energy can be used solely to bring prosperity and progress to the people of a peaceful world.

The bill on the one hand, creates a favorable atmosphere for the achievement of international control, but on the other hand in no way compromises our supreme objective, the defense of the Nation. The bill opens the way for collaboration with other nations on a reciprocal basis, and yet provides complete safeguards for the security of the Military Establishment. It is expressly stated in the bill that international arrangements approved by the Senate or by Congress will supersede the provisions of this act in case of conflict and furthermore, the Commission is directed to give maximum effect to the policies contained in any such international arrangements.

Mr. President, the development and control of atomic energy is an enormous and complicated endeavor. It has many parts; it can take many shapes; it can affect our lives in many ways—indeed, it can make or destroy us. If we can consider this whole bill in relation to the whole activity it covers, its real spirit and its true wisdom will become clear. This bill provides for free mining, free invention, free science, free industrial research. Even if this bill had been drafted only to provide this Nation with the means of waging war, it would have been a foolish and near-sighted bill if it had failed to provide for these freedoms. Freedom is the source of our strength. And in fact freedom is more than this, it is a precious possession in itself and the source of our wealth and happiness.

At the same time that this bill gives these freedoms it takes the necessary police measures over atomic energy for our troubled and dangerous present. With these police meas-

ures, the bill provides us with the means of retaining our immediate military strength and of continuously increasing it as long as the unfortunate necessity for it shall remain.

With all this power of control and development, the organization established in this bill is set within the traditional forms of that government we so cherish and we so hope to preserve. The atomic-energy organization is responsible to the courts and to the Congress, not merely in theory but in actual practice, through specific provisions of this bill. The bill is written not only for the world of power politics which we must soon outgrow but it aids that growth by encouraging international agreements and by creating the atmosphere of peaceful cooperation in which such agreements can be formed and successfully executed.

Looking at the problem as coolly as a man can, and keeping in mind all its aspects and possibilities, I can conceive of no other combination of powers and duties and no other structure of organization, no other provisions for contingencies that could be better fitted to this complicated and difficult subject.

Mr. President, it is my sincere conviction that S. 1717 deserves the immediate and favorable action of the Senators.

It is in every sense of the word a non-partisan bill. The subject was of too great importance to receive anything but considerations of national interest. It was approved, after months of study and preparation, by men of both parties whose only concern was the best interest of our country and the people who compose it. That was the anvil on which every section was hammered out. That was the criterion by which every word was judged.

It is a bill which comes to you with unanimous committee approval. No section, no paragraph, no word was adopted except by unanimous consent. The achievement of unanimity on every phase of a subject so complex and so vital merits the Senators' approbation.

It is an enlightened, forward-looking, common-sense bill based on the realities of the world we live in, the peculiarities of atomic energy and the fundamental principles of our Government.

It is a bill based on careful study and extended consideration. Aware of their unique responsibility as molders of the atomic age, the committee members labored long and ardently to forge in the fires of democratic action the finest instrument they could devise in the discharge of their grave assignment. Mr. President, it strikes me that right here is a good time to do something I have wanted to do for a long time—and that is, to pay public tribute to the devotion, the energy and the zeal with which the members of the committee tackled their job. It required from each one of them many hours of painstaking work in a field new to all of us. Without their selfless application to the complex problems before us, we might still be floundering around in the uncharted seas of atomic energy legislation.

Mr. President, S. 1717 is a single bill. It is a unified structure. Certain provisions are so closely connected with others that amendments to one section might destroy or damage several other sections. Each provision is a necessary strand in the closely knit fabric of the bill as a whole.

Mr. President, it is now within the province of this body to say "Yes" or "No" to this bill—but not to this bill alone. The principles which underlie United States legislation on atomic energy must serve as the foundation stone for the mansion of tomorrow. They are principles which will undoubtedly guide the framing of legislation in many countries. We are faced with a responsibility of immense gravity. In His infinite wisdom, the Almighty God had placed it in the power of the Senators to be architects of the future. That task will require from

the men of Government in this Congress wisdom, imagination, and courage to equal the wisdom, imagination, and courage displayed by the men of sciences in giving us atomic power.

Mr. President, now, if ever, time is of the essence, for humanity stands today at the cross roads of history. We hold in trust a power that is capable of unraveling the very fabric of our civilization or of development as a mighty force for human welfare. The "force from which the sun draws its powers" is at the beck and call of man. Shall this force be used for good or for evil? For construction or destruction? For life or death? The Senators must say.

Mr. President, the only power on earth greater than atomic power is the power in the brain of man. I have supreme faith that through the exercise of that power we will refuse to be the engineers of our own destruction. Instead, God willing, we will put the giant of atomic energy to work building a nobler country in a finer world for the benefit of all the people.

The PRESIDING OFFICER. The question now recurs on agreeing to the committee amendment as amended.

The amendment as amended was agreed to.

The PRESIDING OFFICER. The bill is before the Senate and open to further amendment. If there be no further amendment to be offered, the question is on the engrossment and third reading of the bill.

The bill (S. 1717) was ordered to be engrossed for a third reading, read the third time, and passed.

AGRICULTURAL DEPARTMENT APPROPRIATIONS, 1947

Mr. RUSSELL. Mr. President, I move that the Senate proceed to consider House bill 5605, the Agricultural Department appropriation bill for 1947.

The PRESIDING OFFICER. The question is on agreeing to the motion of the Senator from Georgia.

Mr. GURNEY. Mr. President, reserving the right to object, it is conceded, is it not, that it is the intention of the Senator from Georgia to conclude consideration of the bill this afternoon, and that on Monday next we shall proceed with the regular order of business?

Mr. RUSSELL. I do not expect that consideration of the bill will require more than a few minutes. I know of no controversial points with regard to the bill which would prevent disposing of it so that we may be able to adjourn by 4 o'clock.

The PRESIDING OFFICER. The question is on agreeing to the motion of the Senator from Georgia.

The motion was agreed to; and the Senate proceeded to consider the bill (H. R. 5605) making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1947, and for other purposes, which had been reported from the Committee on Appropriations with amendments.

Mr. RUSSELL. Mr. President, I ask unanimous consent that the formal reading of the bill be dispensed with, that it be read for amendment, and that the committee amendments be first considered.

The PRESIDING OFFICER. Is there objection? The Chair hears none, and it is so ordered.

79TH CONGRESS
2^D SESSION

S. 1717

IN THE HOUSE OF REPRESENTATIVES

JUNE 5, 1946

Referred to the Committee on Military Affairs

AN ACT

For the development and control of atomic energy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 DECLARATION OF POLICY

4 SECTION 1. (a) FINDINGS AND DECLARATION.—Re-
5 search and experimentation in the field of nuclear chain
6 reaction have attained the stage at which the release of
7 atomic energy on a large scale is practical. The sig-
8 nificance of the atomic bomb for military purposes is evident.
9 The effect of the use of atomic energy for civilian purposes
10 upon the social, economic, and political structures of today
11 cannot now be determined. It is a field in which unknown

1 factors are involved. Therefore, any legislation will neces-
2 sarily be subject to revision from time to time. It is rea-
3 sonable to anticipate, however, that tapping this new source
4 of energy will cause profound changes in our present way
5 of life. Accordingly, it is hereby declared to be the policy
6 of the people of the United States that, subject at all
7 times to the paramount objective of assuring the common
8 defense and security, the development and utilization of
9 atomic energy shall, so far as practicable, be directed to-
10 ward improving the public welfare, increasing the standard
11 of living, strengthening free competition in private enter-
12 prise, and promoting world peace.

13 (b) PURPOSE OF ACT.—It is the purpose of this Act to
14 effectuate the policies set out in section 1 (a) by providing,
15 among others, for the following major programs relating to
16 atomic energy:

17 (1) A program of assisting and fostering private re-
18 search and development to encourage maximum scientific
19 progress;

20 (2) A program for the control of scientific and technical
21 information which will permit the dissemination of such in-
22 formation to encourage scientific progress, and for the sharing
23 on a reciprocal basis of information concerning the practical
24 industrial application of atomic energy as soon as effective

1 and enforceable safeguards against its use for destructive
2 purposes can be devised;

3 (3) A program of federally conducted research and
4 development to assure the Government of adequate scientific
5 and technical accomplishment;

6 (4) A program for Government control of the produc-
7 tion, ownership, and use of fissionable material to assure
8 the common defense and security and to insure the broadest
9 possible exploitation of the field; and

10 (5) A program of administration which will be con-
11 sistent with the foregoing policies and with international
12 arrangements made by the United States, and which will
13 enable the Congress to be currently informed so as to take
14 further legislative action as may hereafter be appropriate.

15 ORGANIZATION

16 SEC. 2. (a) ATOMIC ENERGY COMMISSION.—

17 (1) There is hereby established an Atomic Energy
18 Commission (herein called the Commission), which shall be
19 composed of five members. Three members shall constitute
20 a quorum of the Commission. The President shall desig-
21 nate one member as Chairman of the Commission.

22 (2) Members of the Commission shall be appointed by
23 the President, by and with the advice and consent of the
24 Senate. In submitting any nomination to the Senate, the

1 President shall set forth the experience and the qualifications
2 of the nominee. The term of office of each member of the
3 Commission taking office prior to the expiration of two years
4 after the date of enactment of this Act shall expire upon the
5 expiration of such two years. The term of office of each
6 member of the Commission taking office after the expiration
7 of two years from the date of enactment of this Act shall be
8 five years, except that (A) the terms of office of the mem-
9 bers first taking office after the expiration of two years from
10 the date of enactment of this Act shall expire, as designated
11 by the President at the time of appointment, one at the end
12 of three years, one at the end of four years, one at the end
13 of five years, one at the end of six years, and one at the
14 end of seven years, after the date of enactment of this Act;
15 and (B) any member appointed to fill a vacancy occurring
16 prior to the expiration of the term for which his predecessor
17 was appointed, shall be appointed for the remainder of such
18 term. Any member of the Commission may be removed by
19 the President for inefficiency, neglect of duty, or malfeasance
20 in office. Each member, except the Chairman, shall receive
21 compensation at the rate of \$15,000 per annum; and the
22 Chairman shall receive compensation at the rate of \$17,500
23 per annum. No member of the Commission shall engage in
24 any other business, vocation, or employment than that of
25 serving as a member of the Commission.

1 (3) The principal office of the Commission shall be in
2 the District of Columbia, but the Commission or any duly
3 authorized representative may exercise any or all of its pow-
4 ers in any place. The Commission shall hold such meetings,
5 conduct such hearings, and receive such reports as may be
6 necessary to enable it to carry out the provisions of this Act.

7 (4) There are hereby established within the Com-
8 mission—

9 (A) a General Manager, who shall discharge such
10 of the administrative and executive functions of the
11 Commission as the Commission may direct. The Gen-
12 eral Manager shall be appointed by the President by
13 and with the advice and consent of the Senate, and shall
14 receive compensation at the rate of \$15,000 per annum.
15 The Commission may make recommendations to the
16 President with respect to the appointment or removal of
17 the General Manager.

18 (B) a Division of Research, a Division of Pro-
19 duction, a Division of Engineering, and a Division of
20 Military Application. Each division shall be under the
21 direction of a Director who shall be appointed by the
22 Commission, and shall receive compensation at the rate
23 of \$14,000 per annum. The Commission shall require
24 each such division to exercise such of the Commission's
25 powers under this Act as the Commission may deter-

1 mine, except that the authority granted under section
2 3 (a) of this Act shall not be exercised by the Division
3 of Research.

4 (b) GENERAL ADVISORY COMMITTEE.—There shall be
5 a General Advisory Committee to advise the Commission on
6 scientific and technical matters relating to materials, produc-
7 tion, and research and development, to be composed of nine
8 members, who shall be appointed from civilian life by the
9 President. Each member shall hold office for a term of six
10 years, except that (1) any member appointed to fill a
11 vacancy occurring prior to the expiration of the term for
12 which his predecessor was appointed, shall be appointed for
13 the remainder of such term; and (2) the terms of office of the
14 members first taking office after the date of the enactment
15 of this Act shall expire, as designated by the President at
16 the time of appointment, three at the end of two years, three
17 at the end of four years, and three at the end of six years,
18 after the date of the enactment of this Act. The Committee
19 shall designate one of its own members as Chairman. The
20 Committee shall meet at least four times in every calendar
21 year. The members of the Committee shall receive a per
22 diem compensation of \$50 for each day spent in meetings or
23 conferences, and all members shall receive their necessary
24 traveling or other expenses while engaged in the work of
25 the Committee.

1 (c) MILITARY LIAISON COMMITTEE.—There shall be
2 a Military Liaison Committee consisting of representatives
3 of the Departments of War and Navy, detailed or assigned
4 thereto, without additional compensation, by the Secretaries
5 of War and Navy in such number as they may determine.
6 The Commission shall advise and consult with the Committee
7 on all atomic energy matters which the Committee deems to
8 relate to military applications, including the development,
9 manufacture, use, and storage of bombs, the allocation of
10 fissionable material for military research, and the control
11 of information relating to the manufacture or utilization of
12 atomic weapons. The Commission shall keep the Committee
13 fully informed of all such matters before it and the Com-
14 mittee shall keep the Commission fully informed of all atomic
15 energy activities of the War and Navy Departments. The
16 Committee shall have authority to make written recommen-
17 dations to the Commission on matters relating to military
18 applications from time to time as it may deem appropriate.
19 If the Committee at any time concludes that any action,
20 proposed action, or failure to act of the Commission on such
21 matters is adverse to the responsibilities of the Departments
22 of War or Navy, derived from the Constitution, laws, and
23 treaties, the Committee may refer such action, proposed
24 action, or failure to act to the Secretaries of War and Navy.

1 If either Secretary concurs, he may refer the matter to the
2 President, whose decision shall be final.

3 RESEARCH

4 SEC. 3. (a) RESEARCH ASSISTANCE.—The Commis-
5 sion is directed to exercise its powers in such manner as
6 to insure the continued conduct of research and develop-
7 ment activities in the fields specified below by private or
8 public institutions or persons and to assist in the acquisi-
9 tion of an ever-expanding fund of theoretical and prac-
10 tical knowledge in such fields. To this end the Commission
11 is authorized and directed to make arrangements (including
12 contracts, agreements, grants-in-aid, and loans) for the con-
13 duct of research and development activities relating to—

14 (1) nuclear processes;

15 (2) the theory and production of atomic energy,
16 including processes, materials, and devices related to
17 such production;

18 (3) utilization of fissionable and radioactive ma-
19 terials for medical, biological, health, or military pur-
20 poses;

21 (4) utilization of fissionable and radioactive ma-
22 terials and processes entailed in the production of such
23 materials for all other purposes, including industrial
24 uses; and

1 (5) the protection of health during research and
2 production activities.

3 The Commission may make such arrangements without re-
4 gard to the provisions of section 3709 of the Revised
5 Statutes (U. S. C., title 41, sec. 5) upon certification by
6 the Commission that such action is necessary in the interest
7 of the common defense and security, or upon a showing
8 that advertising is not reasonably practicable, and may
9 make partial and advance payments under such arrange-
10 ments, and may make available for use in connection there-
11 with such of its equipment and facilities as it may deem
12 desirable. Such arrangements shall contain such provisions
13 to protect health, to minimize danger from explosion and
14 other hazards to life or property, and to require the report-
15 ing and to permit the inspection of work performed there-
16 under, as the Commission may determine; but shall not
17 contain any provisions or conditions which prevent the
18 dissemination of scientific or technical information, except
19 to the extent such dissemination is prohibited by law.

20 (b) RESEARCH BY THE COMMISSION.—The Commis-
21 sion is authorized and directed to conduct, through its own
22 facilities, activities and studies of the types specified in sub-
23 section (a) above.

1 PRODUCTION OF FISSIONABLE MATERIAL

2 SEC. 4. (a) DEFINITION.—As used in this Act, the
3 term “produce”, when used in relation to fissionable material,
4 means to manufacture, produce, or refine fissionable material,
5 as distinguished from source materials as defined in section
6 5 (b) (1), or to separate fissionable material from other
7 substances in which such material may be contained or to
8 produce new fissionable material.

9 (b) PROHIBITION.—It shall be unlawful for any person
10 to own any facilities for the production of fissionable material
11 or for any person to produce fissionable material, except to
12 the extent authorized by subsection (c).

13 (c) OWNERSHIP AND OPERATION OF PRODUCTION
14 FACILITIES.—

15 (1) OWNERSHIP OF PRODUCTION FACILITIES.—

16 The Commission shall be the exclusive owner of all
17 facilities for the production of fissionable material other
18 than facilities which (A) are useful in the conduct of
19 research and development activities in the fields speci-
20 fied in section 3, and (B) do not, in the opinion of
21 the Commission, have a potential production rate ade-
22 quate to enable the operator of such facilities to produce
23 within a reasonable period of time a sufficient quantity
24 of fissionable material to produce an atomic bomb or
25 any other atomic weapon.

(2) OPERATION OF THE COMMISSION'S PRODUCTION FACILITIES.—The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be

1 made without regard to the provisions of section 3709
2 of the Revised Statutes (U. S. C., title 41, sec. 5) upon
3 certification by the Commission that such action is neces-
4 sary in the interest of the common defense and security,
5 or upon a showing that advertising is not reasonably
6 practicable, and partial and advance payments may be
7 made under such contracts. The President shall deter-
8 mine at least once each year the quantities of fissionable
9 material to be produced under this paragraph.

10 (3) OPERATION OF OTHER PRODUCTION FACILI-
11 TIES.—Fissionable material may be produced in the con-
12 duct of research and development activities in facilities
13 which, under paragraph (1) above, are not required to
14 be owned by the Commission.

15 (d) IRRADIATION OF MATERIALS.—For the purpose of
16 increasing the supply of radioactive materials, the Commis-
17 sion is authorized to expose materials of any kind to the
18 radiation incident to the processes of producing or utilizing
19 fissionable material.

20 (e) MANUFACTURE OF PRODUCTION FACILITIES.—
21 Unless authorized by a license issued by the Commission, no
22 person may manufacture, produce, transfer, or acquire any
23 facilities for the production of fissionable material. Licenses
24 shall be issued in accordance with such procedures as the
25 Commission may by regulation establish and shall be issued in

1 accordance with such standards and upon such conditions as
2 will restrict the production and distribution of such facilities
3 to effectuate the policies and purposes of this Act. Nothing
4 in this section shall be deemed to require a license for such
5 manufacture, production, transfer, or acquisition incident to
6 or for the conduct of research or development activities in the
7 United States of the types specified in section 3, or to prohibit
8 the Commission from manufacturing or producing such facil-
9 ities for its own use.

10 CONTROL OF MATERIALS

11 SEC. 5. (a) FISSIONABLE MATERIALS.—

12 (1) DEFINITION.—As used in this Act, the term “fis-
13 sionable material” means plutonium, uranium enriched in the
14 isotope 235, any other material which the Commission
15 determines to be capable of releasing substantial quantities
16 of energy through nuclear chain reaction of the material, or
17 any material artificially enriched by any of the foregoing;
18 but does not include source materials, as defined in section
19 5 (b) (1).

20 (2) GOVERNMENT OWNERSHIP OF ALL FISSIONABLE
21 MATERIAL.—All right, title, and interest within or under
22 the jurisdiction of the United States, in or to any fissionable
23 material, now or hereafter produced, shall be the property
24 of the Commission, and shall be deemed to be vested in
25 the Commission by virtue of this Act. Any person owning

1 any interest in any fissionable material at the time of the
2 enactment of this Act, or owning any interest in any ma-
3 terial at the time when such material is hereafter determined
4 to be a fissionable material, or who lawfully produces any
5 fissionable material incident to privately financed research
6 or development activities, shall be paid just compensation
7 therefor. The Commission may, by action consistent with
8 the provisions of paragraph (4) below, authorize any such
9 person to retain possession of such fissionable material, but
10 no person shall have any title in or to any fissionable material.

11 (3) PROHIBITION.—It shall be unlawful for any person,
12 after sixty days from the effective date of this Act to (A)
13 possess or transfer any fissionable material, except as author-
14 ized by the Commission, or (B) export from or import into
15 the United States any fissionable material, or (C) directly
16 or indirectly engage in the production of any fissionable
17 material outside of the United States.

18 (4) DISTRIBUTION OF FISSIONABLE MATERIAL.—
19 Without prejudice to its continued ownership thereof, the
20 Commission is authorized to distribute fissionable material,
21 with or without charge, to applicants requesting such material
22 (A) for the conduct of research or development activities
23 either independently or under contract or other arrangement
24 with the Commission, (B) for use in medical therapy, or
25 (C) for use pursuant to a license issued under the authority

1 of section 7. Such material shall be distributed in such
2 quantities and on such terms that no applicant will be en-
3 abled to obtain an amount sufficient to construct a bomb
4 or other military weapon. The Commission is directed to
5 distribute sufficient fissionable material to permit the con-
6 duct of widespread independent research and development
7 activity, to the maximum extent practicable. In deter-
8 mining the quantities of fissionable material to be distributed,
9 the Commission shall make such provisions for its own needs
10 and for the conservation of fissionable material as it may
11 determine to be necessary in the national interest for the
12 future development of atomic energy. The Commission shall
13 not distribute any material to any applicant, and shall recall
14 any distributed material from any applicant, who is not
15 equipped to observe or who fails to observe such safety
16 standards to protect health and to minimize danger from
17 explosion or other hazard to life or property as may be
18 established by the Commission, or who uses such material
19 in violation of law or regulation of the Commission or in a
20 manner other than as disclosed in the application therefor.

21 (5) The Commission is authorized to purchase or other-
22 wise acquire any fissionable material or any interest therein
23 outside the United States, or any interest in facilities for the
24 production of fissionable material, or in real property on
25 which such facilities are located, without regard to the pro-

visions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under contracts for such purposes. The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

(b) SOURCE MATERIALS.—

(1) DEFINITION.—As used in this Act, the term “source material” means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

(2) LICENSE FOR TRANSFERS REQUIRED.—Unless authorized by a license issued by the Commission, no person may transfer or deliver and no person may receive possession of or title to any source material after removal from its place of deposit in nature, except that licenses shall not be required for quantities of source materials which, in the opinion of the Commission, are unimportant.

1 (3) ISSUANCE OF LICENSES.—The Commission shall
2 establish such standards for the issuance, refusal, or revoca-
3 tion of licenses as it may deem necessary to assure adequate
4 source materials for production, research, or development
5 activities pursuant to this Act or to prevent the use of such
6 materials in a manner inconsistent with the national welfare.
7 Licenses shall be issued in accordance with such procedures
8 as the Commission may by regulation establish.

9 (4) REPORTING.—The Commission is authorized to
10 issue such regulations or orders requiring reports of owner-
11 ship, possession, extraction, refining, shipment, or other han-
12 dling of source materials as it may deem necessary, except
13 that such reports shall not be required with respect to (A)
14 any source material prior to removal from its place of deposit
15 in nature, or (B) quantities of source materials which in the
16 opinion of the Commission are unimportant or the reporting
17 of which will discourage independent prospecting for new
18 deposits.

19 (5) ACQUISITION.—The Commission is authorized and
20 directed to purchase, take, requisition, condemn, or otherwise
21 acquire, supplies of source materials or any interest in real
22 property containing deposits of source materials to the extent
23 it deems necessary to effectuate the provisions of this Act.
24 Any purchase made under this paragraph may be made

1 without regard to the provisions of section 3709 of the Re-
2 vised Statutes (U. S. C., title 41, sec. 5) upon certification
3 by the Commission that such action is necessary in the
4 interest of the common defense and security, or upon a show-
5 ing that advertising is not reasonably practicable, and partial
6 and advance payments may be made thereunder. The Com-
7 mission may establish guaranteed prices for all source mate-
8 rials delivered to it within a specified time. Just compensa-
9 tion shall be made for any property taken, requisitioned, or
10 condemned under this paragraph.

11 (6) EXPLORATION.—The Commission is authorized to
12 conduct and enter into contracts for the conduct of exploratory
13 operations, investigations, and inspections to determine the
14 location, extent, mode of occurrence, use, or conditions of
15 deposits or supplies of source materials, making just compen-
16 sation for any damage or injury occasioned thereby. Such
17 exploratory operations may be conducted only with the
18 consent of the owner, but such investigations and inspections
19 may be conducted with or without such consent.

20 (7) PUBLIC LANDS.—All uranium, thorium, and all
21 other materials determined pursuant to paragraph (1) of
22 this subsection to be peculiarly essential to the production of
23 fissionable material, contained, in whatever concentration, in
24 deposits in the public lands are hereby reserved for the use
25 of the United States; except that with respect to any location,

1 entry, or settlement made prior to the date of enactment of
2 this Act no reservation shall be deemed to have been made,
3 if such reservation would deprive any person of any existing
4 or inchoate rights or privileges to which he would otherwise
5 be entitled or would otherwise enjoy: *Provided, however,*
6 That no person, corporation, partnership, or association,
7 which had any part, directly or indirectly, in the develop-
8 ment of the atomic bomb project, may benefit by any loca-
9 tion, entry, or settlement upon the public domain made after
10 such person, corporation, partnership, or association took
11 part in such project. The Secretary of the Interior shall
12 cause to be inserted in every patent, conveyance, lease, per-
13 mit, or other authorization hereafter granted to use the public
14 lands or their mineral resources, under any of which there
15 might result the extraction of any materials so reserved, a
16 reservation to the United States of all such materials, whether
17 or not of commercial value, together with the right of
18 the United States through its authorized agents or repre-
19 sentatives at any time to enter upon the land and prospect
20 for, mine, and remove the same, making just compen-
21 sation for any damage or injury occasioned thereby. Any
22 lands so patented, conveyed, leased, or otherwise disposed of
23 may be used, and any rights under any such permit or
24 authorization may be exercised, as if no reservation of such
25 materials had been made under this subsection; except that,

1 when such use results in the extraction of any such material
2 from the land in quantities which may not be transferred or
3 delivered without a license under this subsection, such ma-
4 terial shall be the property of the Commission and the Com-
5 mission may require delivery of such material to it by any
6 possessor thereof after such material has been separated as
7 such from the ores in which it was contained. If the Com-
8 mission requires the delivery of such material to it, it shall
9 pay to the person mining or extracting the same, or to
10 such other person as the Commission determines to be
11 entitled thereto, such sums, including profits, as the Com-
12 mission deems fair and reasonable for the discovery, mining,
13 development, production, extraction, and other services per-
14 formed with respect to such material prior to such delivery,
15 but such payment shall not include any amount on account
16 of the value of such material before removal from its place
17 of deposit in nature. If the Commission does not require
18 delivery of such material to it, the reservation made pur-
19 suant to this paragraph shall be of no further force or effect.

20 (c) BYPRODUCT MATERIALS.—

21 (1) DEFINITION.—As used in this Act, the term
22 “byproduct material” means any radioactive material (ex-
23 cept fissionable material) yielded in or made radioactive by
24 exposure to the radiation incident to the processes of produc-
25 ing or utilizing fissionable material.

1 (2) DISTRIBUTION.—The Commission is authorized
2 to distribute, with or without charge, byproduct materials
3 to applicants seeking such materials for research or develop-
4 ment activity, medical therapy, industrial uses, or such other
5 useful applications as may be developed. In distributing
6 such materials, the Commission shall give preference to
7 applicants proposing to use such materials in the conduct of
8 research and development activity or medical therapy. The
9 Commission shall not distribute any byproduct materials to
10 any applicant, and shall recall any distributed materials from
11 any applicant, who is not equipped to observe or who fails
12 to observe such safety standards to protect health as may be
13 established by the Commission or who uses such materials
14 in violation of law or regulation of the Commission or in a
15 manner other than as disclosed in the application therefor.

16 (d) GENERAL PROVISIONS.—

17 (1) The Commission shall not distribute any fissionable
18 or source material to any person for a use which is not under
19 or within the jurisdiction of the United States or to any
20 foreign government.

21 (2) The Commission shall establish by regulation a
22 procedure by which any person who is dissatisfied with
23 the distribution or refusal to distribute to him, or the recall
24 from him, of any fissionable or byproduct materials or with
25 the issuance, refusal, or revocation of a license to him for the

1 transfer or receipt of source materials may obtain a review
2 of such determination by a board of appeal consisting of three
3 members appointed by the Commission. The Commission
4 may in its discretion review and revise any decision of such
5 board of appeal.

6 MILITARY APPLICATIONS OF ATOMIC
7 ENERGY

8 SEC. 6. (a) AUTHORITY.—The Commission is author-
9 ized to—

10 (1) conduct experiments and do research and de-
11 velopment work in the military application of atomic
12 energy; and

13 (2) engage in the production of atomic bombs,
14 atomic bomb parts, or other military weapons utilizing
15 fissionable materials; except that such activities shall be
16 carried on only to the extent that the express consent
17 and direction of the President of the United States
18 has been obtained, which consent and direction shall
19 be obtained at least once each year.

20 The President from time to time may direct the Commission
21 to deliver such quantities of weapons to the armed forces for
22 such use as he deems necessary in the interest of national
23 defense.

24 (b) PROHIBITION.—It shall be unlawful for any per-
25 son to manufacture, produce, transfer, or acquire any equip-

1 ment or device utilizing fissionable material or atomic energy
2 as a military weapon, except as may be authorized by the
3 Commission. Nothing in this subsection shall be deemed to
4 modify the provisions of section 4 of this Act, or to prohibit
5 research activities in respect of military weapons, or to per-
6 mit the export of any such equipment or device.

7 UTILIZATION OF ATOMIC ENERGY

8 SEC. 7. (a) LICENSE REQUIRED.—It shall be unlawful,
9 except as provided in sections 5 (a) (4) (A) or (B) or
10 6 (a), for any person to manufacture, produce, or export
11 any equipment or device utilizing fissionable material or
12 atomic energy or to utilize fissionable material or atomic
13 energy with or without such equipment or device, except
14 under and in accordance with a license issued by the Com-
15 mission authorizing such manufacture, production, export, or
16 utilization. No license may permit any such activity if fis-
17 sionable material is produced incident to such activity, except
18 as provided in sections 3 and 4. Nothing in this section
19 shall be deemed to require a license for the conduct of research
20 or development activities relating to the manufacture of such
21 equipment or devices or the utilization of fissionable material
22 or atomic energy, or for the manufacture or use of equipment
23 or devices for medical therapy.

24 (b) REPORT TO CONGRESS.—Whenever in its opinion
25 any industrial, commercial, or other nonmilitary use of fis-

1 sionable material or atomic energy has been sufficiently
2 developed to be of practical value, the Commission shall pre-
3 pare a report to the President stating all the facts with
4 respect to such use, the Commission's estimate of the social,
5 political, economic, and international effects of such use and
6 the Commission's recommendations for necessary or desirable
7 supplemental legislation. The President shall then transmit
8 this report to the Congress together with his recommenda-
9 tions. No license for any manufacture, production, export,
10 or use shall be issued by the Commission under this section
11 until after (1) a report with respect to such manufacture,
12 production, export, or use has been filed with the Congress;
13 and (2) a period of ninety days in which the Congress was
14 in session has elapsed after the report has been so filed. In
15 computing such period of ninety days, there shall be excluded
16 the days on which either House is not in session because of
17 an adjournment of more than three days.

18 (c) ISSUANCE OF LICENSES.—After such ninety-day
19 period, unless hereafter prohibited by law, the Commission
20 may license such manufacture, production, export, or use in
21 accordance with such procedures and subject to such condi-
22 tions as it may by regulation establish to effectuate the
23 provisions of this Act. The Commission is authorized and
24 directed to issue licenses on a nonexclusive basis and to
25 supply to the extent available appropriate quantities of

1 fissionable material to licensees (1) whose proposed activities
2 will serve some useful purpose proportionate to the quantities
3 of fissionable material to be consumed; (2) who are
4 equipped to observe such safety standards to protect health
5 and to minimize danger from explosion or other hazard to
6 life or property as the Commission may establish; and (3)
7 who agree to make available to the Commission such tech-
8 nical information and data concerning their activities pur-
9 suant to such licenses as the Commission may determine
10 necessary to encourage similar activities by as many licensees
11 as possible. Each such license shall be issued for a specified
12 period, not to exceed one year, shall be revocable at any
13 time by the Commission in accordance with such procedures
14 as the Commission may establish, and may be renewed upon
15 the expiration of such period. Where activities under any
16 license might serve to maintain or to foster the growth of
17 monopoly, restraint of trade, unlawful competition, or other
18 trade position inimical to the entry of new, freely competitive
19 enterprises in the field, the Commission is authorized and
20 directed to refuse to issue such license or to establish such
21 conditions to prevent these results as the Commission, in
22 consultation with the Attorney General, may determine.
23 The Commission shall report promptly to the Attorney Gen-
24 eral any information it may have with respect to any utili-

1 zation of fissionable material or atomic energy which appears
2 to have these results. No license may be given to any
3 person for activities which are not under or within the
4 jurisdiction of the United States or to any foreign gov-
5 ernment.

6 (d) BYPRODUCT POWER.—If energy which may be
7 utilized is produced in the production of fissionable material,
8 such energy may be used by the Commission, transferred
9 to other Government agencies, or sold to public or private
10 utilities under contracts providing for reasonable resale prices.

11 INTERNATIONAL ARRANGEMENTS

12 SEC. 8. (a) DEFINITION.—As used in this Act, the
13 term “international arrangement” shall mean any treaty
14 approved by the Senate or international agreement approved
15 by the Congress, during the time such treaty or agreement is
16 in full force and effect.

17 (b) EFFECT OF INTERNATIONAL ARRANGEMENTS.—
18 Any provision of this Act or any action of the Commission
19 to the extent that it conflicts with the provisions of any
20 international arrangement made after the date of enactment
21 of this Act shall be deemed to be of no further force or effect.

22 (c) POLICIES CONTAINED IN INTERNATIONAL AR-
23 RANGEMENTS.—In the performance of its functions under
24 this Act, the Commission shall give maximum effect to the
25 policies contained in any such international arrangement.

1 PROPERTY OF THE COMMISSION

2 SEC. 9. (a) The President shall direct the transfer to
3 the Commission of all interests owned by the United States
4 or any Government agency in the following property:

5 (1) All fissionable material; all atomic weapons and
6 parts thereof; all facilities, equipment, and materials for
7 the processing, production, or utilization of fissionable ma-
8 terial or atomic energy; all processes and technical infor-
9 mation of any kind, and the source thereof (including data,
10 drawings, specifications, patents, patent applications, and
11 other sources) relating to the processing, production, or utili-
12 zation of fissionable material or atomic energy; and all con-
13 tracts, agreements, leases, patents, applications for patents,
14 inventions and discoveries (whether patented or unpatented),
15 and other rights of any kind concerning any such items;

16 (2) All facilities, equipment, and materials, devoted
17 primarily to atomic energy research and development; and

18 (3) Such other property owned by or in the custody
19 or control of the Manhattan Engineer District or other Gov-
20 ernment agencies as the President may determine.

21 (b) In order to render financial assistance to those
22 States and localities in which the activities of the Com-
23 mission are carried on and in which the Commission has ac-
24 quired property previously subject to State and local tax-
25 ation, the Commission is authorized to make payments to

1 State and local governments in lieu of property taxes. Such
2 payments may be in the amounts, at the times, and upon the
3 terms the Commission deems appropriate, but the Commis-
4 sion shall be guided by the policy of not making payments
5 in excess of the taxes which would have been payable for
6 such property in the condition in which it was acquired,
7 except in cases where special burdens have been cast upon
8 the State or local government by activities of the Commission,
9 the Manhattan Engineer District or their agents. In any
10 such case, any benefit accruing to the State or local gov-
11 ernment by reason of such activities shall be considered in
12 determining the amount of the payment. The Commission,
13 and the property, activities, and income of the Commission,
14 are hereby expressly exempted from taxation in any manner
15 or form by any State, county, municipality, or any sub-
16 division thereof.

17 CONTROL OF INFORMATION

18 SEC. 10. (a) POLICY.—It shall be the policy of the
19 Commission to control the dissemination of restricted data in
20 such a manner as to assure the common defense and security.
21 Consistent with such policy, the Commission shall be guided
22 by the following principles:

23 (1) That information with respect to the use of
24 atomic energy for industrial purposes should be shared
25 with other nations on a reciprocal basis as soon as the

1 Congress declares by joint resolution that effective and
2 enforceable international safeguards against the use of
3 such energy for destructive purposes have been estab-
4 lished; and

5 (2) That the dissemination of scientific and tech-
6 nical information relating to atomic energy should be
7 permitted and encouraged so as to provide that free
8 interchange of ideas and criticisms which is essential to
9 scientific progress.

10 (b) DISSEMINATION.—The Commission is authorized
11 and directed to establish such information services, publica-
12 tions, libraries, and other registers of available information
13 as it may deem necessary or desirable to provide for the dis-
14 semination of information in accordance with subsection (a).

15 (c) RESTRICTIONS.—

16 (1) The term “restricted data” as used in this section
17 means all data concerning the manufacture or utilization of
18 atomic weapons, the production of fissionable material, or the
19 use of fissionable material in the production of power, but
20 shall not include any data which the Commission from time
21 to time determines may be published without adversely affect-
22 ing the common defense and security.

23 (2) Whoever, lawfully or unlawfully, having posses-
24 sion of, access to, control over, or being entrusted with, any
25 document, writing, sketch, photograph, plan, model, instru-

1 ment, appliance, note or information involving or incorporat-
2 ing restricted data—

3 (A) communicates, transmits, or discloses the same
4 to any individual or person, or attempts or conspires to
5 do any of the foregoing, with intent to injure the
6 United States or with intent to secure an advantage
7 to any foreign nation, upon conviction thereof, shall be
8 punished by a fine of not more than \$20,000 or im-
9 prisonment for not more than twenty years, or both;

10 (B) communicates, transmits, or discloses the same
11 to any individual or person, or attempts or conspires to
12 do any of the foregoing, with reason to believe such data
13 will be utilized to injure the United States or to secure an
14 advantage to any foreign nation, shall, upon conviction,
15 be punished by a fine of not more than \$10,000 or
16 imprisonment for not more than ten years, or both.

17 (3) Whoever, with intent to injure the United States
18 or with intent to secure an advantage to any foreign nation,
19 acquires or attempts or conspires to acquire any document,
20 writing, sketch, photograph, plan, model, instrument, ap-
21 pliance, note or information involving or incorporating
22 restricted data shall, upon conviction thereof, be punished
23 by a fine of not more than \$20,000 or imprisonment for not
24 more than twenty years, or both.

25 (4) Whoever, with intent to injure the United States or

1 with intent to secure an advantage to any foreign nation,
2 removes, conceals, tampers with, alters, mutilates, or destroys
3 any document, writing, sketch, photograph, plan, model, in-
4 strument, appliance, or note involving or incorporating re-
5 stricted data and used by any individual or person in
6 connection with the production of fissionable material, or
7 research or development relating to atomic energy, conducted
8 by the United States, or financed in whole or in part by
9 Federal funds, or conducted with the aid of fissionable
10 material, shall be punished by a fine of not more than \$20,000
11 or imprisonment for not more than twenty years or both.

12 (5) No person shall be prosecuted for any violation
13 under this section unless and until the Attorney General of
14 the United States has advised and consulted with the Com-
15 mission with respect to such prosecution.

16 (6) This section shall not exclude the applicable pro-
17 visions of any other laws, except that no Government agency
18 shall take any action under such other laws inconsistent with
19 the provisions of this section.

20 (d) INSPECTIONS, RECORDS, AND REPORTS.—The
21 Commission is—

22 (1) authorized by regulation or order to require
23 such reports and the keeping of such records with
24 respect to, and to provide for such inspections of, activ-
25 ities and studies of types specified in section 3 and of

1 activities under licenses issued pursuant to section 7 as
2 may be necessary to effectuate the purposes of this Act;

3 (2) authorized and directed by regulation or order
4 to require regular reports and records with respect to,
5 and to provide for frequent inspections of, the production
6 of fissionable material in the conduct of research and
7 development activities.

8 PATENTS AND INVENTIONS

9 SEC. 11. (a) PRODUCTION AND MILITARY UTILIZA-
10 TION.

11 (1) No patent shall hereafter be granted for any inven-
12 tion or discovery which is useful solely in the production of
13 fissionable material or in the utilization of fissionable material
14 or atomic energy for a military weapon. Any patent granted
15 for any such invention or discovery is hereby revoked, and
16 just compensation shall be made therefor.

17 (2) No patent hereafter granted shall confer any rights
18 with respect to any invention or discovery to the extent that
19 such invention or discovery is used in the production of fis-
20 sionable material or in the utilization of fissionable material
21 or atomic energy for a military weapon. Any rights con-
22 ferred by any patent heretofore granted for any invention or
23 discovery are hereby revoked to the extent that such inven-
24 tion or discovery is so used, and just compensation shall be
25 made therefor.

1 (3) Any person who has made or hereafter makes any
2 invention or discovery useful in the production of fissionable
3 material or in the utilization of fissionable material or atomic
4 energy for a military weapon shall file with the Commission
5 a report containing a complete description thereof, unless such
6 invention or discovery is described in an application for a
7 patent filed in the Patent Office by such person within the
8 time required for the filing of such report. The report cover-
9 ing any such invention or discovery shall be filed on or before
10 whichever of the following is the latest: (A) The sixtieth day
11 after the date of enactment of this Act; (B) the sixtieth day
12 after the completion of such invention or discovery; or (C)
13 the sixtieth day after such person first discovers or first has
14 reason to believe that such invention or discovery is useful
15 in such production or utilization.

16 (b) USE OF INVENTIONS FOR RESEARCH.—No patent
17 hereafter granted shall confer any rights with respect to
18 any invention or discovery to the extent that such invention
19 or discovery is used in the conduct of research or develop-
20 ment activities in the fields specified in section 3. Any
21 rights conferred by any patent heretofore granted for
22 any invention or discovery are hereby revoked to the extent
23 that such invention or discovery is so used, and just compen-
24 sation shall be made therefor.

1 (c) NONMILITARY UTILIZATION.—

2 (1) It shall be the duty of the Commission to declare
3 any patent to be affected with the public interest if (A) the
4 invention or discovery covered by the patent utilizes or is
5 essential in the utilization of fissionable material or atomic
6 energy; and (B) the licensing of such invention or discovery
7 under this subsection is necessary to effectuate the policies
8 and purposes of this Act.

9 (2) Whenever any patent has been declared, pursuant
10 to paragraph (1), to be affected with the public interest—

11 (A) The Commission is hereby licensed to use the
12 invention or discovery covered by such patent in per-
13 forming any of its powers under this Act; and

14 (B) Any person to whom a license has been issued
15 under section 7 is hereby licensed to use the invention
16 or discovery covered by such patent to the extent such
17 invention or discovery is used by him in carrying on
18 the activities authorized by his license under section 7.

19 The owner of the patent shall be entitled to a reasonable
20 royalty fee for any use of an invention or discovery licensed
21 by this subsection. Such royalty fee may be agreed upon
22 by such owner and the licensee, or in the absence of such
23 agreement shall be determined by the Commission.

24 (3) No court shall have jurisdiction or power to stay,
25 restrain, or otherwise enjoin the use of any invention or

1 discovery by a licensee, to the extent that such use is licensed
2 by paragraph (2) above, on the ground of infringement of
3 any patent. If in any action for infringement against
4 such licensee the court shall determine that the defendant
5 is exercising such license, the measure of damages shall be
6 the royalty fee determined pursuant to this section, together
7 with such costs, interest, and reasonable attorney's fees as
8 may be fixed by the court. If no royalty fee has been
9 determined, the court shall stay the proceeding until the
10 royalty fee is determined pursuant to this section. If any
11 such licensee shall fail to pay such royalty fee, the patentee
12 may bring an action in any court of competent jurisdiction
13 for such royalty fee, together with such costs, interest, and
14 reasonable attorney's fees as may be fixed by the court.

15 (d) ACQUISITION OF PATENTS.—The Commission is
16 authorized to purchase, or to take, requisition, or condemn,
17 and make just compensation for, (1) any invention or dis-
18 covery which is useful in the production of fissionable
19 material or in the utilization of fissionable material or atomic
20 energy for a military weapon, or which utilizes or is essential
21 in the utilization of fissionable material or atomic energy,
22 or (2) any patent or patent application covering any such
23 invention or discovery. The Commissioner of Patents shall
24 notify the Commission of all applications for patents hereto-
25 fore or hereafter filed which in his opinion disclose such in-

ventions or discoveries and shall provide the Commission access to all such applications.

(e) COMPENSATION AWARDS, AND ROYALTIES.—

(1) PATENT COMPENSATION BOARD.—The Commission shall designate a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications under this subsection.

(2) ELIGIBILITY.—

(A) Any owner of a patent licensed under subsection (c) (2) or any licensee thereunder may make application to the Commission for the determination of a reasonable royalty fee in accordance with such procedures as it by regulation may establish.

(B) Any person seeking to obtain the just compensation provided in subsections (a), (b), or (d) shall make application therefor to the Commission in accordance with such procedures as it may by regulation establish.

(C) Any person making any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon who is not entitled to compensation therefor under subsection (a) and who has complied with subsection (a) (3) above may make application

1 to the Commission for, and the Commission may grant,
2 an award.

3 (D) Any person making application under this sub-
4 section shall have the right to be represented by counsel.

5 (3) STANDARDS.—

6 (A) In determining such reasonable royalty fee,
7 the Commission shall take into consideration any defense,
8 general or special, that might be pleaded by a defendant
9 in an action for infringement, the extent to which, if any,
10 such patent was developed through federally financed
11 research, the degree of utility, novelty, and importance
12 of the invention or discovery, and may consider the cost
13 to the owner of the patent of developing such invention
14 or discovery or acquiring such patent.

15 (B) In determining what constitutes just compensa-
16 tion under subsection (a), (b), or (d) above, the Com-
17 mission shall take into account the considerations set
18 forth in paragraph (A) above, and the actual use of
19 such invention or discovery, and may determine that
20 such compensation be paid in periodic payments or in a
21 lump sum.

22 (C) In determining the amount of any award under
23 paragraph (2) (C) of this subsection, the Commission
24 shall take into account the considerations set forth in

1 paragraph (A) above, and the actual use of such inven-
2 tion or discovery. Awards so made may be paid by the
3 Commission in periodic payments or in a lump sum.

4 (4) JUDICIAL REVIEW.—Any person aggrieved by any
5 determination of the Commission of an award or of a reason-
6 able royalty fee may obtain a review of such determination in
7 the Court of Appeals for the District of Columbia by filing in
8 such court, within thirty days after notice of such determina-
9 tion, a written petition praying that such determination be set
10 aside. A copy of such petition shall be forthwith served upon
11 the Commission and thereupon the Commission shall file with
12 the court a certified transcript of the entire record in the
13 proceeding, including the findings and conclusions upon
14 which the determination was based. Upon the filing of
15 such transcript the court shall have exclusive jurisdiction
16 upon the record certified to it to affirm the determination in
17 its entirety or set it aside and remand it to the Commission
18 for further proceedings. The findings of the Commission
19 as to the facts, if supported by substantial evidence, shall
20 be conclusive. The court's judgment shall be final, subject,
21 however, to review by the Supreme Court of the United
22 States upon writ of certiorari on petition therefor under
23 section 240 of the Judicial Code (U. S. C., title 28, sec.
24 347), by the Commission or any party to the court pro-
25 ceeding.

GENERAL AUTHORITY

SEC. 12. (a) In the performance of its functions the Commission is authorized to—

(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and byproduct materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this Act, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Com-

1 pulsory Testimony Act of February 11, 1893 (U. S. C.,
2 title 49, sec. 46), shall apply with respect to any indi-
3 vidual who specifically claims such privilege. Witnesses
4 subpenaed under this subsection shall be paid the same
5 fees and mileage as are paid witnesses in the district
6 courts of the United States;

7 (4) appoint and fix the compensation of such offi-
8 cers and employees as may be necessary to carry out
9 the functions of the Commission. Such officers and
10 employees shall be appointed in accordance with the
11 civil-service laws and their compensation fixed in ac-
12 cordance with the Classification Act of 1923, as
13 amended, except that to the extent the Commission
14 deems such action necessary to the discharge of its
15 responsibilities, personnel may be employed and their
16 compensation fixed without regard to such laws. At-
17 torneys appointed under this paragraph may appear
18 for and represent the Commission in any case in any
19 court. The Commission shall make adequate provision
20 for administrative review of any determination to
21 dismiss any employee;

22 (5) acquire such materials, property, equipment,
23 and facilities, establish or construct such buildings and
24 facilities, and modify such buildings and facilities from
25 time to time as it may deem necessary, and construct,

1 acquire, provide, or arrange for such facilities and serv-
2 ices (at project sites where such facilities and services
3 are not available) for the housing, health, safety, wel-
4 fare, and recreation of personnel employed by the Com-
5 mission as it may deem necessary;

6 (6) with the consent of the agency concerned,
7 utilize or employ the services or personnel of any Gov-
8 ernment agency or any State or local government, or
9 voluntary or uncompensated personnel, to perform such
10 functions on its behalf as may appear desirable;

11 (7) acquire, purchase, lease, and hold real and per-
12 sonal property as agent of and on behalf of the United
13 States and to sell, lease, grant, and dispose of such real
14 and personal property as provided in this Act;

15 (8) contract for the expenditure of funds for the
16 purposes specified in section 10 (b) without regard
17 to the provisions of section 87 of the Act of January
18 12, 1895 (28 Stat. 622), and section 11 of the Act
19 of March 1, 1919 (40 Stat. 1270; U. S. C., title 44,
20 sec. 111) ; and

21 (9) without regard to the provisions of the Sur-
22 plus Property Act of 1944 or any other law, make
23 such disposition as it may deem desirable of (A) radio-
24 active materials, and (B) any other property the special

1 disposition of which is, in the opinion of the Com-
2 mission, in the interest of the national security.

3 (b) SECURITY.—The President may, in advance, ex-
4 empt any specific action of the Commission in a particular
5 matter from the provisions of law relating to contracts when-
6 ever he determines that such action is essential in the interest
7 of the common defense and security.

8 (c) ADVISORY COMMITTEES.—The members of the
9 General Advisory Committee established pursuant to section
10 2 (b) and the members of advisory boards established
11 pursuant to subsection (a) (1) of this section may serve
12 as such without regard to the provisions of sections 109
13 and 113 of the Criminal Code (18 U. S. C., secs. 198 and
14 203) or section 19 (e) of the Contract Settlement Act of
15 1944, except insofar as such sections may prohibit any such
16 member from receiving compensation in respect of any par-
17 ticular matter which directly involves the Commission or
18 in which the Commission is directly interested.

19 COMPENSATION FOR PRIVATE PROPERTY

20 ACQUIRED

21 SEC. 13. (a) The United States shall make just com-
22 pensation for any property or interests therein taken or
23 requisitioned pursuant to sections 5 and 11. The Commis-
24 sion shall determine such compensation. If the compensa-
25 tion so determined is unsatisfactory to the person entitled

1 thereto, such person shall be paid 50 per centum of the
2 amount so determined, and shall be entitled to sue the United
3 States in the Court of Claims or in any district court of the
4 United States in the manner provided by sections 24 (20)
5 and 145 of the Judicial Code to recover such further sum
6 as added to said 50 per centum will make up such amount
7 as will be just compensation.

8 (b) In the exercise of the rights of eminent domain and
9 condemnation, proceedings may be instituted under the Act
10 of August 1, 1888 (U. S. C., title 40, sec. 257), or any
11 other applicable Federal statute. Upon or after the filing of
12 the condemnation petition, immediate possession may be
13 taken and the property may be occupied, used, and improved
14 for the purposes of this Act, notwithstanding any other law.
15 Real property acquired by purchase, donation, or other means
16 of transfer may also be occupied, used, and improved for the
17 purposes of this Act, prior to approval of title by the Attorney
18 General.

19 JOINT COMMITTEE ON ATOMIC ENERGY

20 SEC. 14. (a) There is hereby established a Joint Com-
21 mittee on Atomic Energy to be composed of nine Members
22 of the Senate to be appointed by the President of the Sen-
23 ate, and nine Members of the House of Representatives to
24 be appointed by the Speaker of the House of Representa-

1 tives. In each instance not more than five members shall
2 be members of the same political party.

3 (b) The joint committee shall make continuing studies
4 of the activities of the Atomic Energy Commission and of
5 problems relating to the development, use, and control of
6 atomic energy. The Commission shall keep the joint com-
7 mittee fully and currently informed with respect to the
8 Commission's activities. All bills, resolutions, and other
9 matters in the Senate or the House of Representatives re-
10 lating primarily to the Commission or to the development, use,
11 or control of atomic energy shall be referred to the joint com-
12 mittee. The members of the joint committee who are Mem-
13 bers of the Senate shall from time to time report to the Senate,
14 and the members of the joint committee who are Members
15 of the House of Representatives shall from time to time
16 report to the House, by bill or otherwise, their recommen-
17 dations with respect to matters within the jurisdiction of their
18 respective Houses which are (1) referred to the joint com-
19 mittee or (2) otherwise within the jurisdiction of the joint
20 committee.

21 (c) Vacancies in the membership of the joint commit-
22 tee shall not affect the power of the remaining members to
23 execute the functions of the joint committee, and shall be
24 filled in the same manner as in the case of the original selec-

1 tion. The joint committee shall select a chairman and a vice
2 chairman from among its members.

3 (d) The joint committee, or any duly authorized sub-
4 committee thereof, is authorized to hold such hearings, to
5 sit and act at such places and times, to require, by subpoena
6 or otherwise, the attendance of such witnesses and the
7 production of such books, papers, and documents, to admin-
8 ister such oaths, to take such testimony, to procure such
9 printing and binding, and to make such expenditures as it
10 deems advisable. The cost of stenographic services to report
11 such hearings shall not be in excess of 25 cents per hundred
12 words. The provisions of sections 102 to 104, inclusive, of
13 the Revised Statutes shall apply in case of any failure of any
14 witness to comply with a subpoena or to testify when sum-
15 moned under authority of this section.

16 (e) The joint committee is empowered to appoint and
17 fix the compensation of such experts, consultants, technicians,
18 and clerical and stenographic assistants as it deems necessary
19 and advisable, but the compensation so fixed shall not exceed
20 the compensation prescribed under the Classification Act of
21 1923, as amended, for comparable duties. The committee
22 is authorized to utilize the services, information, facilities, and
23 personnel of the departments and establishments of the
24 Government.

ENFORCEMENT

2 SEC. 15. (a) Whoever willfully violates, attempts to
3 violate, or conspires to violate, any provision of sections
4 4 (b), 4 (e), 5 (a) (3), or 6 (b) shall, upon conviction
5 thereof, be punished by a fine of not more than \$10,000 or by
6 imprisonment for not more than five years, or both, except
7 that whoever commits such an offense with intent to injure
8 the United States or with intent to secure an advantage to
9 any foreign nation shall, upon conviction thereof, be pun-
10 ished by a fine of not more than \$20,000 or by imprisonment
11 for not more than twenty years, or both.

(b) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this Act other than those specified in subsection (a) and other than section 10 (c), or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (d), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than two years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(c) Whenever in the judgment of the Commission any person has engaged or is about to engage in any acts or

1 practices which constitute or will constitute a violation of
2 any provision of this Act, or any regulation or order issued
3 thereunder, it may, make application to the appropriate court
4 for an order enjoining such acts or practices, or for an order
5 enforcing compliance with such provision, and upon a show-
6 ing by the Commission that such person has engaged or is
7 about to engage in any such acts or practices a permanent
8 or temporary injunction, restraining order, or other order
9 shall be granted without bond.

10 (d) In case of failure or refusal to obey a subpoena
11 served upon any person pursuant to section 12 (a) (3),
12 the district court for any district in which such person is
13 found or resides or transacts business, upon application by
14 the Commission, shall have jurisdiction to issue an order
15 requiring such person to appear and give testimony or to
16 appear and produce documents, or both, in accordance with
17 the subpoena; and any failure to obey such order of the court
18 may be punished by such court as a contempt thereof.

19 REPORTS

20 SEC. 16. The Commission shall submit to the Congress,
21 in January and July of each year, a report concerning the
22 activities of the Commission. The Commission shall include
23 in such report, and shall at such other times as it deems de-
24 sirable submit to the Congress, such recommendations for

1 additional legislation as the Commission deems necessary or
2 desirable.

3 DEFINITIONS

4 SEC. 17. As used in this Act—

5 (a) The term “atomic energy” shall be construed to
6 mean all forms of energy released in the course of or as
7 a result of nuclear fission or nuclear transformation.

8 (b) The term “Government agency” means any execu-
9 tive department, commission, independent establishment, cor-
10 poration wholly or partly owned by the United States which
11 is an instrumentality of the United States, board, bureau,
12 division, service, office, officer, authority, administration, or
13 other establishment, in the executive branch of the Govern-
14 ment.

15 (c) The term “person” means any individual, corpora-
16 tion, partnership, firm, association, trust, estate, public or
17 private institution, group, the United States or any agency
18 thereof, any government other than the United States, any
19 political subdivision of any such government, and any legal
20 successor, representative, agent, or agency of the foregoing,
21 or other entity, but shall not include the Commission or offi-
22 cers or employees of the Commission in the exercise of duly
23 authorized functions.

24 (d) The term “United States”, when used in a geo-

1 graphical sense, includes all Territories and possessions of
2 the United States.

3 (e) The term "research and development" means theo-
4 retical analysis, exploration, and experimentation, and the
5 extension of investigative findings and theories of a scientific
6 or technical nature into practical application for experimental
7 and demonstration purposes, including the experimental pro-
8 duction and testing of models, devices, equipment, materials,
9 and processes.

10 (f) The term "equipment or device utilizing fissionable
11 material or atomic energy" shall be construed to mean any
12 equipment or device capable of making use of fissionable
13 material or peculiarly adapted for making use of atomic
14 energy and any important component part especially de-
15 signed for such equipment or devices, as determined by the
16 Commission.

17 (g) The term "facilities for the production of fission-
18 able material" shall be construed to mean any equipment or
19 device capable of such production and any important com-
20 ponent part especially designed for such equipment or de-
21 vices, as determined by the Commission.

22 APPROPRIATIONS

23 SEC. 18. (a) There are hereby authorized to be appro-
24 priated such sums as may be necessary and appropriate to

1 carry out the provisions and purposes of this Act. The Acts
2 appropriating such sums may appropriate specified portions
3 thereof to be accounted for upon the certification of the
4 Commission only. Funds appropriated to the Commission
5 shall, if obligated by contract during the fiscal year for which
6 appropriated, remain available for expenditure for four years
7 following the expiration of the fiscal year for which appro-
8 priated. After such four-year period, the unexpended bal-
9 ances of appropriations shall be carried to the surplus fund
10 and covered into the Treasury.

11 (b) Such part as the President may determine of the
12 unexpended balances of appropriations, allocations, or other
13 funds available for expenditure in connection with the Man-
14 hattan Engineer District are hereby transferred to the Com-
15 mission and shall be available for expenditure for the purpose
16 of carrying out the provisions of this Act.

17 SEPARABILITY OF PROVISIONS

18 SEC. 19. If any provision of this Act, or the applica-
19 tion of such provision to any person or circumstances, is
20 held invalid, the remainder of this Act or the application
21 of such provision to persons or circumstances other than
22 those as to which it is held invalid, shall not be affected
23 thereby.

1 SHORT TITLE

2 SEC. 20. This Act may be cited as the “Atomic Energy
3 Act of 1946”.

Passed the Senate June 1 (legislative day, March 5),
1946.

Attest:

LESLIE L. BIFFLE,
Secretary.

AN ACT

For the development and control of atomic
energy.

JUNE 5, 1946

Referred to the Committee on Military Affairs

lem will throw invaluable light upon such vital problems as: (1) The relationship between Federal and State and local governments; (2) the problem of regional development; (3) sound fiscal policy; and (4) the need for a new department in the fields of health, education, and security...The study and investigation recommended in this report would be expected to indicate whether or not there should be some arm of the Government--in the Budget Bureau or elsewhere--with the job of coordinating the general relationship between the Federal Government and State and local governments."

HOUSE

11. ASSISTANT SECRETARIES OF COMMERCE. The Rules Committee reported a resolution for the consideration of S. 1367, to provide for three additional Assistant Secretaries of Commerce (pp. 8715-6, 8732).
12. WATER POLLUTION. Began debate on H.R. 6024, to authorize the Public Health Service, in cooperation with State health authorities, to prepare a program for the prevention and abatement of water pollution (pp. 8720-31).
13. FOOD PRODUCTION. Rep. Gavin, Pa., commended Pennsylvania's food production record (p. 8716).
14. TRAVEL. Received from the Budget Bureau copies of letters to various agencies establishing limitations on travel in appropriations to those agencies for special projects. To Appropriations Committee. (p. 8731.)
15. RIVERS AND HARBORS. Received from the War Department reports on preliminary examinations and surveys for the improvement of waterways and harbors at Grand Bayou Pass, La.; Peoria, Ill.; Schuylkill River, Pa.; and the Intracoastal Waterway from the Miss. River near New Orleans, La., to Corpus Christi, Tex. To Rivers and Harbors Committee. (p. 8731.)
Received a Mo. Legislature memorial relative to development of the Osage River Basin (p. 8733).
16. FLOOD CONTROL. Received from the War Department a report of a preliminary examination and survey of the Sabine River, Tex., for flood control. To Rivers and Harbors Committee. (p. 8732.)
Received a Lycoming County Boroughs Assn. petition in support of flood-control projects for the Susquehanna River (p. 8733).
17. RESEARCH. The Military Affairs Committee reported with amendments S. 1717, for the development and control of atomic energy (H.Rept. 2478) (p. 8732).
18. MINIMUM WAGES. Rep. Voorhis, Calif., urged passage of legislation to raise the minimum hourly wage level to 65¢ (pp. 8716-7).
19. SUBSIDIES. Rep. Clason, Mass., suggested that Congress cut the amount of income taxes withheld from wages if subsidies are removed (p. 8716).
20. BUILDINGS AND GROUNDS. As reported (see Digest 132) authorizes FWA to acquire sites, prepare drawings, and establish limits of cost for building projects notwithstanding the fact that appropriations for construction work have not been made; authorizes the FWA to proceed with the preparation of drawings and specifications (not the construction as reported in Digest 192) and the site acquisition for the GAO buildings, with the preparation of drawings and specifications for the film-storage and Suitland, Md., office building; permits FWA to enter into contracts for construction work within the full limits of cost

notwithstanding the fact that only part of the cost of construction of a public building project has been appropriated by Congress; authorizes FWA to employ established architectural or other professional or technical corporations, firms, or individuals; waives the restrictions on the amount of building rental for rental of quarters on a temporary basis pending the reconstruction or remodeling of Federal buildings; authorizes the Commissioner of Public Buildings to contract for seeding, planting, or landscaping of grounds of any building constructed by PBA in an amount not exceeding \$1,000 without competitive bidding; proposes the elimination of the provision of law which directs that only the cost of any project over and above the proceeds of sale of vacated property in the same locality shall be charged against the total authorization; permits the acceptance of gifts of land or objects in connection with the development of public buildings; proposes the placing of all office furniture and rugs located in space operated by the PBA in its custody and under its control (would not apply to furniture purchased by Government-controlled corporations); gives the Commissioner of Public Buildings authority to control food service in all buildings operated by PBA, except that he may exempt any building if he deems it necessary; authorizes the PBA to purchase existing buildings in D.C. and procure space in D.C. by lease for periods not in excess of 5 years; and authorizes preliminary planning for a new building for the U.S. District Court and the D.C. Court of Appeals.

BILLS INTRODUCED.

21. FOREIGN SERVICE. H.R. 6967 (see Digest 132), to be known as the "Foreign Service Act of 1946," provides that the Foreign Service shall be headed by a Director General who shall coordinate the activities of the Service with needs of other Government agencies; provides for a member of this Department to sit on the Board of the Foreign Service when matters of interest to the Department are considered; requires the President to constitute an Advisory Interdepartmental Committee of the Foreign Service including representatives of Government agencies; provides for the Service to work in behalf of other Government agencies; permits temporary assignment of Foreign Service personnel to other Government agencies; and directs establishment of a Foreign Service Institute to furnish training and instruction to personnel of the Service and other Government agencies.
22. BUDGETING. H.R. 6984 (see Digest 133) declares the policy of Congress that the 1947 fiscal-year expenditures shall not exceed receipts and provides that the President shall so proclaim on July 31, 1946, if the expenditures will, in his opinion, exceed receipts and fix a uniform percentage reduction in all appropriations for the 1947 fiscal year, except permanent appropriations and those for servicing the public debt, for veterans' pensions and benefits, and for trust funds.
23. PERSONNEL; HEALTH. S. 2421, by Sen. Murdock, Utah, to provide for health programs for Government employees. To Education and Labor Committee. (p. 8660.)
24. HOUSING; PRICE CONTROL. S. J. Res. 175, by Sen. Hawkes, N.J.; extending the effective period of the Price-Control Act with respect to the establishment and maintenance of maximum rents until June 30, 1947. To Banking and Currency Committee. (p. 8660.)

ITEMS IN APPENDIX

25. GRAIN SHORTAGE. Speech in the House by Rep. Johnson, Okla., criticizing the regulation requiring sale of one-half of all wheat delivered to elevators to

deavored to rely on the Federal enforcement methods provided for in the committee bill. It is questioned by some that the enforcement provisions of the Mansfield bill are constitutional. In the light of the decision of the Supreme Court of the United States in the New River case, there may be some doubt about it. While I shall not endeavor to argue this phase of the subject, I should like to ask those who so strongly favor Federal control how it would be possible, by mandatory injunction or otherwise, to compel a municipality or any State subdivision, to complete a sewage disposal plant in the light of the fact that under the laws of most States an issue of improvement bonds requires a vote of the people, sometimes by as much as 65 percent of the total vote.

I believe, Mr. Speaker, that the States are willing and able to do their full part, particularly where their powers are augmented by interstate compacts such as the one we have in the Ohio Valley. Water pollution, after all, is a State matter, but the States need the cooperation and financial help of the Federal Government. It is obvious from past experience that if we insist upon the more stringent type of legislation we will continue to be without any legislation at all despite the fact that the advocates of both types of legislation are seeking the same objective. Under the circumstances, Mr. Speaker, I believe it highly advisable that H. R. 4070, introduced by the gentleman from Kentucky [Mr. SPENCE], be accepted as an amendment to the Mansfield bill as reported by the committee.

[Mr. WOLVERTON of New Jersey addressed the Committee. His remarks will appear hereafter in the Appendix.]

(Mr. NORBLAD asked and was given permission to revise and extend his remarks.)

Mr. PETERSON of Florida. Mr. Chairman, we will not be able to finish this bill this evening as there are certain amendments to be offered.

Mr. Chairman, I move that the Committee do now rise.

The motion was agreed to.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr. COOPER, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (H. R. 6024) relating to the prevention and control of water pollution and for other purposes, had come to no resolution thereon.

FLOOD CONTROL

Mr. WHITTINGTON. Mr. Speaker, I call up the conference report on the bill (H. R. 6597) authorizing the construction of certain public works on rivers and harbors for flood control, and for other purposes, and ask unanimous consent that the statement of the managers on the part of the House be read in lieu of the report.

The Clerk read the title of the bill.

The SPEAKER. Is there objection to the request of the gentleman from Mississippi?

Mr. MARCANTONIO. Mr. Speaker, this is still Calendar Wednesday, and therefore I object.

EXTENSION OF REMARKS

Mr. WALTER asked and was given permission to extend his remarks in the RECORD and include a comparison between the recommendations made by the Postwar Economic Policy and Planning Committee and the provisions of the proposed British loan.

Mr. McDONOUGH asked and was given permission to extend his remarks in the RECORD.

Mr. ELSTON, Mr. WOLVERTON of New Jersey, and Mr. HULL asked and were given permission to extend their remarks in the RECORD at the conclusion of general debate on the bill H. R. 6024.

Mr. SPENCE asked and was given permission to extend his remarks in the RECORD.

Mr. WASIELEWSKI asked and was given permission to extend his remarks in the RECORD and include a newspaper article.

Mrs. ROGERS of Massachusetts. Mr. Speaker, 2 days ago I received permission by unanimous consent to insert in the RECORD certain information. I make the request that it be placed in the RECORD today.

The SPEAKER. Is there objection to the request of the gentlewoman from Massachusetts?

There was no objection.

[The matter referred to will appear hereafter in the Appendix.]

Mr. FENTON asked and was given permission to extend his remarks in the RECORD and include an address by General Gavin.

ENROLLED BILLS SIGNED

Mr. ROGERS of New York, from the Committee on Enrolled Bills, reported that that committee had examined and found truly enrolled bills of the House of the following titles, which were thereupon signed by the Speaker:

H. R. 3424. An act to permit renewal of certain trade-mark registrations after expiry thereof, and for other purposes;

H. R. 5356. An act to provide assistance to the Republic of China in augmenting and maintaining a naval establishment, and for other purposes; and

H. R. 6428. An act making appropriations for the Coast Guard, Treasury Department, for the fiscal year ending June 30, 1947, and for other purposes.

The SPEAKER announced his signature to enrolled bills of the Senate of the following titles:

S. 752. An act to amend the act of June 7, 1939 (53 Stat. 811), as amended, relating to the acquisition of stocks of strategic and critical materials for national defense purposes; and

S. 1746. An act to govern distribution of war trophies and devices.

BILL PRESENTED TO THE PRESIDENT

Mr. ROGERS of New York, from the Committee on Enrolled Bills, reported that that committee did on this day present to the President, for his approval, a bill of the House of the following title:

H. R. 3424. An act to permit renewal of certain trade-mark registrations after expiry thereof, and for other purposes.

ADJOURNMENT

Mr. RANKIN. Mr. Speaker, I move that the House do now adjourn.

The motion was agreed to; accordingly (at 4 o'clock and 53 minutes p. m.) the House, under its previous order, adjourned until tomorrow, Thursday, July 11, 1946, at 10 o'clock a. m.

EXECUTIVE COMMUNICATIONS, ETC.

Under clause 2 of rule XXIV, executive communications were taken from the Speaker's table and referred as follows:

1446. A letter from the Acting Secretary of the Navy, transmitting a list of certificates of relief issued by the Secretary of the Navy in various cases during the fiscal year 1945; to the Committee on Expenditures in the Executive Departments.

1447. A letter from the Acting Secretary of Agriculture, transmitting a draft of a proposed bill for the relief of Mrs. Martha P. Matthews, clerk-typist, Jackson, Tenn., Farm Security Administration, United States Department of Agriculture; to the Committee on Claims.

1448. A letter from the Acting Director, Bureau of the Budget, transmitting copies of letters addressed to the heads of various agencies which establish limitations on the amounts which may be expended for travel from sums set apart in appropriations to these agencies for special projects; to the Committee on Appropriations.

1449. A letter from the Secretary of War, transmitting a letter from the Chief of Engineers, United States Army, dated May 31, 1946, submitting a report, together with accompanying papers and illustrations, on a preliminary examination and survey of waterway from the Gulf of Mexico to Empire, La., via Grand Bayou Pass, Bayou Scofield, or other streams to Buras and Empire, authorized by the River and Harbor Act approved on March 2, 1945 (H. Doc. No. 697); to the Committee on Rivers and Harbors and ordered to be printed, with two illustrations.

1450. A letter from the Secretary of War, transmitting a letter from the Chief of Engineers, United States Army, dated May 17, 1946, submitting a report, together with accompanying papers and an illustration, on a review of reports on the Illinois River and Illinois waterway, Illinois, with a view to harbor improvements at and in the vicinity of Peoria, Ill., requested by a resolution of the Committee on Rivers and Harbors, House of Representatives, adopted on October 16, 1944 (H. Doc. No. 698); to the Committee on Rivers and Harbors and ordered to be printed, with an illustration.

1451. A letter from the Secretary of War, transmitting a letter from the Chief of Engineers, United States Army, dated May 7, 1946, submitting a report, together with accompanying papers and illustrations, on a preliminary examination and survey of, and a review of reports on, the Schuylkill River, Pa., authorized by the River and Harbor Act approved on March 2, 1945, and also requested by a resolution of the Committee on Rivers and Harbors, House of Representatives, adopted on March 8, 1945 (H. Doc. No. 699); to the Committee on Rivers and Harbors and ordered to be printed, with three illustrations.

1452. A letter from the Secretary of War, transmitting a letter from the Chief of Engineers, United States Army, dated April 29, 1946, submitting a report, together with accompanying papers and illustrations, on a review of reports on the Intracoastal Waterway from the Mississippi River at or near New Orleans, La., to Corpus Christi, Tex., with a view to modifying the existing project for the waterway in the vicinity of Aransas Pass, Tex., requested by resolutions of the Committee on Rivers and Harbors, House of Representatives, adopted on May 5, 1944, and February 28, 1945 (H. Doc. No. 700); to the Committee on Rivers and Harbors and ordered to be printed, with two illustrations.

1453. A letter from the Acting Comptroller General of the United States, transmitting a report on audit of the Virgin Islands Company for the fiscal year ended June 30, 1945 (H. Doc. No. 701); to the Committee on Expenditures in the Executive Departments and ordered to be printed.

1454. A letter from the Secretary of War, transmitting a letter from the Chief of Engineers, United States Army, dated May 31, 1946, submitting a report, together with accompanying papers and illustrations, on a review of reports on, and a preliminary examination and survey of, the Sabine River and tributaries, Texas, with a view to improvement of Cow Bayou, requested by a resolution of the Committee on Flood Control, House of Representatives, adopted on March 20, 1945, and authorized by the River and Harbor Act approved on March 2, 1945 (H. Doc. No. 702); to the Committee on Rivers and Harbors and ordered to be printed, with two illustrations.

REPORTS OF COMMITTEES ON PUBLIC BILLS AND RESOLUTIONS

Under clause 2 of rule XIII, reports of committees were delivered to the Clerk for printing and reference to the proper calendar as follows:

Mr. SABATH: Committee on Rules. House Resolution 701. Resolution providing for the consideration of S. 1367, an act to provide for the appointment of three additional Assistant Secretaries of Commerce, and for other purposes; without amendment (Rept. No. 2475). Referred to the House Calendar.

Mr. BLAND: Committee on the Merchant Marine and Fisheries. House Joint Resolution 366. Joint resolution authorizing and directing the Director of the Fish and Wildlife Service of the Department of the Interior to investigate and eradicate the predatory sea lampreys of the Great Lakes; with amendments (Rept. No. 2476). Referred to the Committee of the Whole House on the State of the Union.

Mr. RANKIN: Committee on Rivers and Harbors. S. 1516. An act to amend section 12 of the Bonneville Project Act, as amended; with amendments (Rept. No. 2477). Referred to the Committee of the Whole House on the State of the Union.

Mr. MAY: Committee on Military Affairs. S. 1717. An act for the development and control of atomic energy; with amendments (Rept. No. 2478). Referred to the Committee of the Whole House on the State of the Union.

Mr. ELLIOTT: Joint Committee on the Disposition of Executive Papers. House Report No. 2479. Report on the disposition of certain papers of sundry executive departments. Ordered to be printed.

Mr. BLAND: Committee on the Merchant Marine and Fisheries. House Joint Resolution 370. Joint resolution granting certain property to the Commonwealth of Pennsylvania and relinquishing jurisdiction therein; with amendment (Rept. No. 2480). Referred to the Committee of the Whole House on the State of the Union.

Mr. BECKWORTH: Committee on Interstate and Foreign Commerce. H. R. 6406. A bill authorizing the State of Texas, acting through the State Highway Commission of Texas, or the successors thereof, to acquire, construct, maintain, and operate a free bridge across the Rio Grande at or near Del Rio, Tex.; with amendments (Rept. No. 2481). Referred to the House Calendar.

Mr. O'HARA: Committee on Interstate and Foreign Commerce. H. R. 6515. A bill to amend the act entitled "An act authorizing the Nebraska-Iowa Bridge Corp., a Delaware corporation, its successors and assigns, to construct, maintain, and operate a bridge across the Missouri River between Washing-

ton County, Nebr., and Harrison County, Iowa," approved March 6, 1928; without amendment (Rept. No. 2482). Referred to the House Calendar.

Mr. JACKSON: Committee on Indian Affairs. H. R. 6141. A bill to provide funds for cooperation with the school board of Hunter School district for the construction and equipment of a new school building in the town of Hunter, Sawyer County, Wis., to be available to both Indian and non-Indian children; without amendment (Rept. No. 2483). Referred to the Committee of the Whole House on the State of the Union.

Mr. JACKSON: Committee on Indian Affairs. H. R. 6165. A bill to provide for the preparation of a membership roll of the Indians of the Yakima Reservation, Wash., and for other purposes; with amendment (Rept. No. 2484). Referred to the Committee of the Whole House on the State of the Union.

Mr. JACKSON: Committee on Indian Affairs. H. R. 6983. A bill conferring jurisdiction upon the Court of Claims to hear, examine, adjudicate, and render judgment in any and all claims which the Confederated Salish and Kootenai Tribes of Indians of the Flathead Reservation in Montana, or any tribe or band thereof, may have against the United States, and for other purposes; with amendments (Rept. No. 2485). Referred to the Committee of the Whole House on the State of the Union.

Mr. O'HARA: Committee on Interstate and Foreign Commerce. H. R. 6889. A bill to extend the times for commencing and completing the construction of a toll bridge across the St. Louis River between the States of Minnesota and Wisconsin and for other purposes; with amendment (Rept. No. 2486). Referred to the House Calendar.

Mr. JACKSON: Committee on Indian Affairs. S. 115. An act to modify sections 4 and 20 of the Permanent Appropriations Repeal Act, 1934, with reference to certain funds collected in connection with the operation of Indian Service irrigation projects, and for other purposes; with amendment (Rept. No. 2489). Referred to the Committee of the Whole House on the State of the Union.

Mr. JACKSON: Committee on Indian Affairs. S. 1235. An act to authorize the use of the funds of any tribe of Indians for insurance premiums; without amendment (Rept. No. 2490). Referred to the Committee of the Whole House on the State of the Union.

REPORTS OF COMMITTEES ON PRIVATE BILLS AND RESOLUTIONS

Under clause 2 of rule XIII, reports of committees were delivered to the Clerk for printing and reference to the proper calendar, as follows:

Mr. CASE of New Jersey: Committee on Claims. H. R. 2663. A bill for the relief of W. C. Jones; with amendments (Rept. No. 2487). Referred to the Committee of the Whole House.

Mr. CASE of New Jersey: Committee on Claims. H. R. 4608. A bill for the relief of Mrs. Mary D. Johnson; with amendments (Rept. No. 2488). Referred to the Committee of the Whole House.

PUBLIC BILLS AND RESOLUTIONS

Under clause 3 of rule XXII, public bills and resolutions were introduced and severally referred as follows:

By Mr. BUNKER:

H. R. 6989. A bill to permit premiums paid by World War II veterans for national service life insurance to be deducted from gross income for the purposes of the Federal in-

come tax; to the Committee on Ways and Means.

H. R. 6990. A bill to amend section 7 of the Boulder Canyon Project Adjustment Act; to the Committee on Irrigation and Reclamation.

By Mr. CORBETT:

H. R. 6991. A bill granting the consent of Congress to the Commonwealth of Pennsylvania to construct, maintain, and operate a toll highway bridge over the Allegheny River, between a point in or near the borough of Tarentum, in the county of Allegheny, and a point near the boundary of the city of New Kensington and Lower Burrell Township in Westmoreland County, and in the Commonwealth of Pennsylvania; to the Committee on Interstate and Foreign Commerce.

By Mr. DREWRY:

H. R. 6992. A bill to amend the act of May 4, 1898 (30 Stat. 369), as amended to authorize the President to appoint 250 acting assistant surgeons for temporary service; to the Committee on Naval Affairs.

H. R. 6993. A bill to further amend the act of January 16, 1936, as amended, entitled "An act to provide for the retirement and retirement annuities of civilian members of the teaching staff at the United States Naval Academy and the Postgraduate School, United States Naval Academy"; to the Committee on Naval Affairs.

H. R. 6994. A bill to permit the Secretary of the Navy to delegate the authority to compromise and settle claims for damages to property under the jurisdiction of the Navy Department, and for other purposes; to the Committee on Naval Affairs.

By Mr. FISHER:

H. R. 6995. A bill to amend the Nationality Act of 1940 to preserve the nationality of citizens residing abroad; to the Committee on Immigration and Naturalization.

By Mr. HEDRICK:

H. R. 6996. A bill to amend the Immigration Act of February 5, 1917, as amended; to the Committee on Immigration and Naturalization.

By Mr. TOLAN:

H. R. 6997. A bill to amend the act entitled "Compensation for injury, death, or detention of employees of contractors with the United States outside the United States," as amended, for the purpose of making the 100 percent earning provisions effective as of January 1, 1942; to the Committee on the Judiciary.

By Mrs. LUCE:

H. J. Res. 379. Joint resolution to regulate the sale of essays or proofs of postage stamps; to the Committee on the Post Office and Post Roads.

By Mr. KELLEY of Pennsylvania:

H. Con. Res. 160. Concurrent resolution authorizing the printing of the handbook entitled "Laws Relating to the Physically Handicapped" as a House document, and providing for additional copies thereof; to the Committee on Printing.

By Mr. BULWINKLE:

H. Con. Res. 161. Concurrent resolution providing for the compiling, printing, and binding of the address of the Honorable John G. Winant and other proceedings in commemoration of the life, character, and public services of the late President Franklin D. Roosevelt; to the Committee on Printing.

MEMORIAL

Under clause 3 of rule XXII, a memorial was presented and referred as follows:

By the SPEAKER: Memorial of the Chamber of Deputies of Argentina, expressing greetings to the people of the United States on the anniversary of the Declaration of In-

ATOMIC ENERGY ACT OF 1946

JULY 10, 1946.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. MAY, from the Committee on Military Affairs, submitted the following

REPORT

[To accompany S. 1717]

■ The Committee on Military Affairs, to whom was referred the bill (S. 1717) for the development and control of atomic energy, having considered the same, report favorably thereon with amendments and recommend that the bill as amended do pass.

The amendments are as follows:

Page 3, line 19, before the period, insert the following:

at least one of whom shall be a representative of the armed forces.

Page 5, line 23, after the period, insert the following new sentence:

The Director of the Division of Military Application shall be a representative of the armed forces.

Page 8, after line 2, insert the following new subsection:

(d) APPOINTMENT OF ARMY AND NAVY OFFICERS.—Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 ed., title 10, sec. 576), section 212 of the Act entitled "An Act making appropriations for the Legislative Branch of the Government for the fiscal year ending June 30, 1933, and for other purposes", approved June 30, 1932, as amended (U. S. C., 1940 ed., title 5, sec. 59a), section 2 of the Act entitled "An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-five, and for other purposes", approved July 31, 1894, as amended (U. S. C., 1940 ed., title 5, sec. 62), or any other law, not to exceed two active or retired officers of the Army or the Navy may serve at the same time as members of the Commission, and any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to their commissioned status as such officers. Any such officer serving as a member of the Commission or as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in paragraph (2) or (4) (B), as the case may be, of subsection (a) of this section.

Page 11, line 18, insert after the comma, after the word "contract", the following:

except as authorized by the Commission.

Page 12, line 17, strike out the word "is" and insert in lieu thereof the following:

land persons performing pursuant to section 3 (a), section 4 (e) (1) (A) and (B) or section 7 are.

Page 19, line 6, strike out "person" and insert in lieu thereof "individual".

Page 19, line 10, strike out "person" and insert in lieu thereof "individual".

Page 19, line 11, before the period, insert the following:
unless first authorized so to do by the Commission.

Page 21, line 17, insert "(A)" after the word "distribute".

Page 21, line 18, strike out the words "or source".

Page 21, line 19, strike out the word "or" and insert in lieu thereof a comma.

Page 21, line 20, before the period, insert the following:

, or to persons within the jurisdiction of the United States where the distribution thereof would be inimical to the common defense and security, or (B) any source material, if, in the opinion of the Commission, the distribution of such source material would be inimical to the common defense and security.

Page 22, line 21, insert "(1)" at the beginning thereof and, before the word "weapons", insert "fissionable materials or".

Page 22, line 23, before the period, insert:

or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon.

Page 22, line 25, before the word "to", insert:
, except as provided in section 6 (a),.

Page 25, line 12, strike out "to exceed" and insert in lieu thereof "less than".

Page 26, line 4, strike out "or" and insert in lieu thereof a comma.

Page 26, line 5, before the period, insert:

, or to persons within the jurisdiction of the United States where the issuance thereof would be inimical to the common defense and security.

Page 26, line 14, after the word "agreement", insert the word "hereafter".

Page 31, strike out lines 12 to 15, inclusive.

Page 31, line 16 strike out "(6)" and insert in lieu thereof "(5)".

Page 40, beginning in line 16, strike out

Attorneys appointed under this paragraph may appear for and represent the Commission in any case in any court.

Page 43, after line 18, insert the following:

JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

SEC. 14. (a) Notwithstanding the provisions of section 12 of the Administrative Procedure Act (Public Law 404, Seventy-ninth Congress, approved June 11, 1946) which provide when such Act shall take effect, section 10 of such Act (relating to judicial review) shall be applicable, upon the enactment of this Act, to any agency action under the authority of this Act or by any agency created by or under the provisions of this Act.

(b) Except as provided in subsection (a), no provision of this Act shall be held to supersede or modify the provisions of the Administrative Procedure Act.

(c) As used in this section the terms "agency action" and "agency" shall have the same meaning as is assigned to such terms in the Administrative Procedure Act.

Page 43, line 20, strike out "14" and insert in lieu thereof "15".

Page 43, lines 21 and 23, strike out "nine" and insert in lieu thereof "eleven".

Page 44, in line 1, strike out "five" and insert in lieu thereof "six".

Page 46, line 2, strike out "15" and insert in lieu thereof "16".

Page 47, line 9, strike out "shall" and insert in lieu thereof "may", and strike out "without bond".

Page 47, after line 18, insert the following new paragraph:

(e) All violations of this Act shall be investigated by the Federal Bureau of Investigation of the Department of Justice.

Page 47, line 20, strike out "16" and insert in lieu thereof "17".

Page 48, line 4, strike out "17" and insert in lieu thereof "18".

Page 49, line 2, insert, before the period, the words "and the Canal Zone".

Page 49, line 19, after the word "device", insert "peculiarly adapted for and".

Page 49, line 23, strike out "18" and insert "19".

Page 50, line 18, strike out "19" and insert "20".

Page 51, line 2, strike out "20" and insert "21".

Your committee, during the fall of 1945, held extensive hearings on the subject of atomic energy on H. R. 4280, and after adequate hearings reported a bill (H. R. 4566) on October 8, embodying in many respects the same provisions as contained in the bill herewith reported, S. 1717, as amended by your committee. In the hearings before the House committee, the War Department and various other departments of Government concerned had an opportunity to and did appear and present the views which are available in printed hearings. It was stated to the committee at that time by the Secretary of War as follows:

The manner in which this legislation was prepared will be of interest to you. In May of this year, 2 months before the test in New Mexico showed conclusively that the atomic bomb would work, Secretary Stinson, with the approval of the President, appointed an interim committee to recommend legislation that would insure that this discovery would be controlled and developed in the best interests of the people of this country.

The Secretary served as chairman of the committee, with George L. Harrison, former chairman of the Federal Reserve Bank of New York and present president of the New York Life Insurance Co., as his alternate. Mr. Harrison is here today. The other members of the committee were Secretary James F. Byrnes, then a private citizen; Ralph A. Bard, Under Secretary of the Navy; William L. Clayton, Assistant Secretary of State; Dr. Vannevar Bush, director of the Office of Scientific Research and Development and president of the Carnegie Institution of Washington; Dr. James B. Conant, chairman of the National Defense Research Committee and president of Harvard University; and Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, and Chief of the Office of Field Service in the Office of Scientific Research and Development.

General Groves was present in an advisory capacity at all meetings of the committee. The members were also aided by the advice and experience of eminent scientists who had rendered invaluable service in the atomic bomb project—Dr. J. R. Oppenheimer, Dr. E. O. Lawrence, Dr. Enrico Fermi, and Dr. Arthur H. Compton. Representative industrialists who had taken a prominent part in the project also assisted the committee in its work.

The drafting of the bill, in line with the principles and policies established by the committee, was done by Brig. Gen. Kenneth C. Royall and Mr. William L. Marbury, both of whom have frequently appeared before your committee and who

are present this morning to answer any questions you may have as to the details of the bill.

When the interim committee had reached unanimous agreement on the scope and language of the proposed legislation, it was submitted to interested Government agencies, including the Department of State, the Department of the Interior, and the Department of Justice. With one or two minor exceptions, the revisions suggested by these departments were incorporated into the bill.

In the opinion of the interim committee, the legislation you now have is the soundest and most comprehensive that could be drawn to cover all those phases of domestic control of atomic energy that require action in the interest of national security, world peace, and the promotion of human welfare. The final draft was reviewed by the President before its transmittal to Congress.

Thus it will be seen that the bill (H. R. 4566) then represented the fixed views of the War Department, Navy Department, and other executive departments of the Government, as well as the views of many top scientists and scholars, including Dr. Vannevar Bush, Director of the National Academy of Science; Dr. James B. Conant, president of Harvard University; and the noted University of Chicago scientist, Dr. Leo Szilard. It was believed by the committee, when they reported that bill, that they had met all the objections that had been urged against it and that it was a good bill.

Subsequent to that time, the United States Senate constituted a special committee, known as the Atomic Energy Committee, and that committee made extensive study and conducted long hearings, after which they, on the 19th day of April 1946, some 7 months after the report of the first atomic-energy bill, known as the May-Johnson bill, which the Senate took up and passed with slight debate or discussion, and that bill is the one your committee now reports to the House with amendments.

The principal issue involved in the original hearings held by this committee on the subject of atomic energy was to what extent the armed forces should be permitted to retain the military secret of the atomic bomb as a military weapon and, in addition thereto, what civilian uses of atomic energy might be made available to the general public without divulging or disclosing the secret formulas and mechanical plans for the construction of bombs as a military weapon. Your committee, in the present bill now herewith reported, has provided by amendment to S. 1717 that at least one of the five members of the Commission set up to take over and control and operate the Government plants and property devoted to the development of atomic energy shall be a representative of the armed forces and that the member of the Liaison Committee, provided for in the Senate bill herewith reported, who has to do with the military application of atomic energy, shall be a representative of the armed forces. On these two amendments hangs the "bone of contention". There are, however, many important issues involved—one of which is the extent of the power and authority granted in the legislation to the Commission set up therein. It is believed by some that the powers invested in the Commission are unprecedented and unnecessary. On this view there is diversity of opinion in the committee, but the bill is herewith reported so that the House of Representatives may consider the same under an open rule, which means that the House will have the right to reconsider all amendments written into the Senate bill by your committee, as well as any other amendments which may be offered from the floor.

ANALYSIS OF S. 1717, AS REPORTED, BY SECTIONS

Definitions

In order that subsequent explanation of the bill may be more clearly understood the definitions of terms used in the bill are as follows:

"Produce", when used in relation to fissionable material, means (1) to manufacture, produce, or refine fissionable material, as distinguished from source materials, or (2) to separate fissionable material from other substances in which such material may be contained, or (3) to produce new fissionable material (sec. 4 (a)).

"Fissionable material" means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material, or any material artificially enriched by any of the foregoing; but does not include source materials (sec. 5 (a) (1)).

"Source material" means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time (sec. 5 (b) (1)).

"Byproduct material" means any radioactive material (except fissionable material) yielded in or made radioactive by exposure to the radiation incident to the processes of producing or utilizing fissionable material (sec. 5 (c) (1)).

"International arrangement" means any treaty approved by the Senate or international agreement hereafter approved by the Congress, during the time such treaty or agreement is in full force and effect (sec. 8 (a)).

"Atomic energy" means all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation (sec. 18 (a)).

"Government agency" means any executive department, commission, independent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other establishment, in the executive branch of the Government (sec. 18 (b)).

"Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent, or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions (sec. 18 (c)).

"United States", when used in a geographical sense, includes all Territories and possessions of the United States and the Canal Zone (sec. 18 (d)).

"Research and development" means theoretical analysis, exploration, and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental production and testing of models, devices, equipment, materials, and processes (sec. 18 (e)).

"Equipment or device utilizing fissionable material or atomic energy" means any equipment or device capable of making use of fissionable material or peculiarly adapted for making use of atomic energy and any important component part especially designed for such equipment or devices, as determined by the Commission (sec. 18 (f)).

"Facilities for the production of fissionable material" shall be construed to mean any equipment or device peculiarly adapted for and capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission (sec. 18 (g)).

Section 1. Declaration of policy

Subsection (a) contains statements of fact and a declaration that it is the policy of the people of the United States that, subject at all times to the paramount objective in assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, (1) be directed toward improving the public welfare, (2) increasing the standard of living, (3) strengthening free competition in private enterprise, and (4) promote world peace.

Subsection (b) states that it is the purpose of the legislation to effectuate the policies enumerated in the above paragraph by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information* concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the field; and

(5) A program of administration which will be consistent with the foregoing policies and with international arrangements made by the United States, and which will enable the Congress to be currently informed so as to take further legislative action as may hereafter be appropriate.

Section 2. Organization

Subsection (a) establishes an Atomic Energy Commission and, within the Commission, a General Manager, a Division of Research, a Division of Production, a Division of Engineering, and a Division of Military Application. Subsection (b) provides that there shall be a General Advisory Committee and subsection (c) provides that there shall be a Military Liaison Committee.

The Commission is to be composed of five full-time members, appointed by the President and confirmed by the Senate. At least one member is required to be a representative of the armed forces. This

member may be a civilian who, at the time of his appointment, is designated by the President as being a representative of the armed forces or he may be an active or retired officer of the Army or the Navy. The President may appoint not to exceed two active or retired officers of the Army or the Navy to serve at the same time as members of the Commission. It is the purpose of the bill, as reported, to insure that the armed forces will have some representation on the Commission and also to insure that at no time will the Commission be subject to control by the armed forces.

Initial appointments to the Commission will expire 2 years after the date of enactment of the legislation. Upon the expiration of such 2 years members are to be appointed in rotation so that eventually members will be serving staggered 5-year terms. The Chairman of the Commission will receive compensation at the rate of \$17,500 per annum and the other members at the rate of \$15,000 per annum.

The General Manager, who is to discharge such of the administrative and executive functions of the Commission as the Commission directs, is to be appointed by the President by and with the advice and consent of the Senate, and is to receive compensation at the rate of \$15,000 per annum.

The four divisions of the Commission are each to be under the direction of a director to be appointed by the Commission and to receive compensation at the rate of \$14,000 per annum. The Director of the Division of Military Application is required to be a representative of the armed forces and, as in the case of the member of the Commission designated as representative of the armed forces, may be a civilian or may be an active or retired officer of the Army or the Navy. Each division will exercise such of the Commission's powers as the Commission may determine, except that the Division of Research may not exercise the authority of the Commission under section 3 (a) of the bill to make arrangements (including contracts, agreements, grants-in-aid, and loans) for the conduct of research and development activities.

The General Advisory Committee is to advise the Commission on scientific and technical matters relating to materials, production, and research and development. It is to be composed of nine members appointed from civilian life by the President. The members are to hold staggered 6-year terms. Initial appointments are to expire three at the end of 2 years, three at the end of 4 years, and three at the end of 6 years, respectively, after the date of enactment of this legislation. The members of the Committee are to receive a per diem compensation of \$50 for each day spent in meetings or conferences and also their necessary travel or other expenses while engaged in the work of the Committee.

The Military Liaison Committee is to consist of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine. The Atomic Energy Commission is required to advise and consult with the Committee, and keep it fully informed on all atomic energy matters which the Committee deems to relate to military applications. The Committee is required to keep the Atomic Energy Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee will have authority to make written recommendations to

the Atomic Energy Commission on matters relating to military applications and if the Committee at any time concludes that any action, proposed action, or failure to act of the Atomic Energy Commission on such matters is adverse to the responsibilities of the Departments of War or Navy the Committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy and if either of the Secretaries concurs he may refer the matter to the President whose decision shall be final.

Section 3. Research

Subsection (a) directs the Commission to exercise its powers in such manner as to insure the continued conduct of research and development activities by private or public institutions or persons and to assist in the acquisition of an ever expanding fund of theoretical and practical knowledge in—

- (1) Nuclear processes;
- (2) The theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) Utilization of fissionable and radioactive materials for medical, biological, health, or military purposes;
- (4) Utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and
- (5) The protection of health during research and production activities.

To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, grants-in-aid, and loans) for the conduct of research and development activities relating to such fields. Such arrangements may be made without regard to the provisions of law relating to advertising for proposals respecting the same upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable.

Subsection (b) authorizes and directs the Commission to conduct, through its own facilities, activities and studies of the types specified in the above paragraph.

Section 4. Production of fissionable material

Subsection (a) defines the term "production" when used in relation with fissionable material.

Subsection (b) makes it unlawful, except to the extent authorized by subsection (c), for any person (1) to own any facilities for the production of fissionable material or (2) to produce fissionable material.

Paragraph (1) of subsection (c) provides that the Commission shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (1) are useful in the conduct of research and development activities in the fields specified in section 3, and (2) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon. Paragraph (2) of subsection (c) requires the Commission to produce or to provide for the production of fissionable material in its own facilities, and authorizes the Commission to make, or to continue in effect, contracts with persons obligating them to

produce fissionable material in facilities owned by the Commission. Any contract made under the provisions of this paragraph may be made without advertising for proposals respecting the same upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable. The President is required to determine at least once each year the quantities of fissionable material to be produced under this paragraph. Paragraph (3) provides that fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1), are not required to be owned by the Commission.

For the purpose of increasing the supply of radioactive materials subsection (d) of section 4 permits the Commission and certain other persons to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

Subsection (c) of section 4 provides that unless authorized by a license issued by the Commission, no person may manufacture, produce, transfer, or acquire any facilities for the production of fissionable material, except that a license is not required where the activity is incident to or for the conduct of research or development activities in the United States of the types specified in section 3.

Section 5. Control of materials

Subsection (a) relates to the control of fissionable materials. Paragraph (1) defines the term "fissionable material". Paragraph (2) provides for Government ownership of all fissionable material and provides just compensation to persons from whom ownership of fissionable material is taken. Paragraph (3) makes it unlawful for any person, after 60 days from the effective date of the legislation, to (A) possess or transfer any fissionable material except as authorized by the Commission, (B) export from or import into the United States any fissionable material, or (C) directly or indirectly engage in the production of any fissionable material outside of the United States. Paragraph (4) authorizes the Commission to distribute fissionable material with or without charge for conducting research and development activities, for use in medical therapy, or for use in devices utilizing atomic energy pursuant to licenses under section 7. Paragraph (5) authorizes the Commission to acquire fissionable material or interest therein outside the United States, any interest in facilities for the production of fissionable material, or in real property on which such facilities are located, without advertising upon certification by the Commission that such action is necessary in the interest of common defense and security or upon a showing that advertising is not reasonably practicable. Just compensation is required to be made for such facilities or real property.

Subsection (b) of section 5 relates to control of source materials. Paragraph (1) defines the term "source material". Paragraph (2) requires licenses for the transfer of possession of or title to any source material after removal from its place of deposit in nature, except that licenses are not to be required for quantities of source material which, in the opinion of the Commission, are unimportant. Paragraph (3) relates to the issuance of such licenses by the Commission. Paragraph (4) authorizes the Commission to issue regulations or orders requiring reports of ownership, possession, extraction, refining, or

other handling of source materials as it may deem necessary except that reports are not to be required with respect to (A) any source material prior to removal from its place of deposit in nature or (B) quantities which are unimportant or the reporting of which will discourage independent prospecting for new deposits. Paragraph (5) contains provisions authorizing the Commission to acquire supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of the legislation. Paragraph (6) authorizes the Commission to conduct and enter into contracts for the conduct of exploratory operations. Paragraph (7) reserves deposits of source material in public lands for the use of the United States.

Subsection (c) of section 5 relates to the control of byproduct materials. Paragraph (1) defines the term "byproduct material". Paragraph (2) relates to the distribution of byproduct materials by the Commission for research or development activity, medical therapy, industrial use, or such other useful applications as may be developed.

Subsection (d) of section 5 provides that the Commission shall not distribute (1) any fissionable material to any person for a use which is not under or within the jurisdiction of the United States, to any foreign government, or to persons within the jurisdiction of the United States where the distribution would be inimical to the common defense and security, or (2) any source material, if, in the opinion of the Commission, the distribution of such source material would be inimical to the common defense and security. As reported, this provision will permit the Commission to distribute source material for export in fabricated commercial articles when such source material has become a component or integral part of such fabricated articles. This subsection, in paragraph (2), requires the Commission to establish a procedure by which any person who is dissatisfied with the distribution or refusal to distribute to him, or the recall from him, of any fissionable or byproduct materials, or with the issuance, refusal, or revocation of a license to him, or the transfer or receipt of source materials may obtain a review of such determination by a board of appeal consisting of three members appointed by the Commission. The Commission may in its discretion review and revise any decision of such board of appeal.

Section 6. Military applications of atomic energy

Subsection (a) authorizes the Commission to (1) conduct experiments and do research and development work in the military application of atomic energy, and (2) engage in the production of the atomic bombs, atomic-bomb parts, or other military weapons utilizing fissionable materials; except that such activities shall be carried on only to the extent that the express consent and direction of the President has been obtained, which consent and direction is required to be obtained at least once each year. The President from time to time may direct the Commission (1) to deliver such quantities of fissionable materials or weapons to the armed forces for such use as he deems necessary in the interest of national defense, or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device capable of making use of fissionable materials or peculiarly adapted for making use of atomic energy as a military weapon.

Subsection (b) provides that except as authorized by the Commission (pursuant to direction of the President under sec. 6 (a) or otherwise), it shall be unlawful for any person to manufacture, produce, transfer, or acquire any equipment or device utilizing fissionable materials or atomic energy as a military weapon.

Section 7. Utilization of atomic energy

Subsection (a) provides that it shall be unlawful, except as provided in section 5 (a) (4) (A) or (B) or 6 (a), for any person to manufacture, produce, or export any equipment or device utilizing fissionable material or atomic energy, or to utilize fissionable material or atomic energy without a license.

Subsection (b) provides that no such license shall be issued by the Commission until after (1) a report with respect to such manufacture, production, export, or use has been filed with the Congress, and (2) a period of 90 days in which the Congress was in session has elapsed after the report has been so filed.

Subsection (c) provides that after the 90-day period referred to in subsection (b), unless hereafter prohibited by law, the Commission may issue licenses in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this legislation. Licenses are to be on a nonexclusive basis and the Commission is to supply fissionable material to licensees (1) whose proposed activities will serve some useful purposes proportionate to the quantities of materials consumed, (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish, and (3) who agree to make available to the Commission certain technical information and data. Each license is required to be issued for a specified period of not less than 1 year. Licenses may not be given (1) to any person or activity which is not under or within the jurisdiction of the United States, (2) to any foreign government, or (3) to persons within the jurisdiction of the United States where the interests thereof would be inimicable to the common defense and security. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission is required to report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results.

Subsection (d) of section 7 provides that energy produced in the production of fissionable material may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities under contracts providing for reasonable resale prices.

Section 8. International arrangements

This section provides that this act shall have no further force or effect to the extent that it conflicts with the provisions of any treaty approved by the Senate or international agreement hereafter approved by the Congress during the time such treaty or agreement is in full

force and effect, and that the Commission in the performance of its functions under this legislation shall give maximum effect to the policy contained in any such treaty or agreement.

Section 9. Property of the Commission

Under this section the Commission is to take over all the resources of the United States Government devoted to or related to atomic-energy development, and is authorized to reimburse States and municipalities for loss of taxes incurred through its acquisition of property.

Section 10. Control of information

Subsection (a) of this section sets forth the policy and principles which will guide the Commission in its control of the dissemination of data (1) concerning the manufacture or utilization of atomic weapons, (2) the production of fissionable material, or (3) the use of fissionable material in the production of power.

Subsection (b) requires the Commission to make information available in accordance with the policy and principles prescribed by subsection (a).

Subsection (c) prescribes criminal penalties with respect to the disclosure of certain data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power. The penalties prescribed are \$20,000 or imprisonment for not more than 20 years, or both, where there is intent to injure the United States or intent to secure an advantage to any foreign nation, and \$10,000 or imprisonment for not more than 10 years, or both, where there is reason to believe that such data will be utilized to injure the United States, or to secure an advantage to any foreign nation.

Subsection (d) authorizes the Commission, by regulation or order, to require reports and keeping of records with respect to, and to provide for inspections of, certain research and development activities and studies and activities under licenses issued pursuant to section 7.

Section 11. Patents and inventions

Subsection (a) forbids the creation of patent rights with respect to any invention or discovery relating to the production of fissionable material or the utilization of fissionable material or atomic energy for a military weapon. It revokes any such rights heretofore granted and provides that just compensation shall be made for the rights so revoked. Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon is required to file with the Commission a report containing a complete description thereof unless the invention or discovery is described in an application for a patent.

Subsection (b) prohibits the creation of patent rights to the extent that an invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Such rights conferred by any patent heretofore granted are revoked to the extent that such invention or discovery is so used. Provision is made for just compensation for the revocation of such rights.

Subsection (c) makes it the duty of the Commission to declare any patent to be affected with the public interest if (1) the invention or discovery covered by the patent utilizes or is essential in the utiliza-

tion of fissionable material or atomic energy and (2) the licensing of such invention or discovery is necessary to effectuate the policies and the purposes of the legislation. The Commission is licensed to use the invention or discovery covered by such patent in performing any of its powers under the legislation and any person to whom a license has been issued under section 7 is licensed to use the invention or discovery covered by the patent to the extent used by him in carrying on the activities authorized by his license. Provision is made for a reasonable royalty fee to be paid to the owner of the patent.

Subsection (d) authorizes the Commission to purchase, or to take, requisition, or condemn, and make just compensation for, any invention or discovery referred to above or any patent or patent application covering any such invention or discovery.

Subsection (e) provides the administrative procedure for the determination of reasonable royalty fees, just compensation, and awards for inventions or discoveries which are not patentable and provides judicial review of the determinations of reasonable royalty fees and awards.

Section 12. General authority

Subsection (a) of this section gives the Commission various general grants of authority to enable it to discharge its responsibilities.

Subsection (b) provides that the President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he deems that such action is essential in the interest of the common defense and security.

Subsection (c) provides that members of the General Advisory Committee and members of advisory boards established by the Commission may serve as such without regard to provisions of law which prohibit officers and employees from being interested in claims against the United States except insofar as such provisions prohibit any such member from receiving compensation in respect of any particular matter which directly involves the Commission or in which the Commission is directly interested.

Section 13. Compensation for private property acquired

Subsection (a) provides that the United States shall make just compensation for any property or interest therein taken or requisitioned pursuant to sections 5 (fissionable and source materials) and 11 (patents and patent rights). If the compensation determined by the Commission is unsatisfactory to the person entitled thereto, the person must be paid 50 percent of the amount so determined and is entitled to sue the United States to recover such further sum as added to such 50 percent will be a just compensation.

Subsection (b) provides that in the exercise of the rights of eminent domain and condemnation proceedings may be instituted under the act of August 1, 1888, or any other applicable Federal statute.

Section 14. Judicial review and administrative procedure

This section affirms the provision of the Administrative Procedure Act, which provides that it will apply to legislation subsequently enacted. It is provided, however, that section 10 of the Administrative Procedure Act, relating to judicial review, for the purposes of this legislation shall take effect immediately.

Section 15. Joint Committee on Atomic Energy

This section establishes a Joint Committee on Atomic Energy to be composed of 11 Members of the Senate to be appointed by the President of the Senate and 11 Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. The joint committee is to make continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. The Commission is to keep the joint committee fully and currently informed with respect to the Commission's activities. Bills, resolutions, and other matters relating primarily to the Commission or to the development, use, and control of atomic energy are to be referred to the joint committee. The members of the joint committee report to their respective Houses by bill or otherwise their recommendations with respect to matters within the jurisdiction of their respective Houses which are referred to the joint committee or are otherwise within the jurisdiction of the joint committee. The committee will have subpoena power and the power to appoint and fix the compensation of its employees.

Section 16. Enforcement

Subsections (a) and (b) of this section contain the criminal penalties for violations and attempts and conspiracies to violate the provisions of the act. The punishment for offenses committed with intent to injure the United States or with intent to secure an advantage for any foreign nation is a fine of not more than \$20,000 or imprisonment for not more than 20 years, or both. The punishment for offenses committed without such intent is a fine of not more than \$5,000 or by imprisonment for not more than 2 years, or both, in the case of offenses relating to fissionable material, facilities for the production of fissionable material, and equipment or devices utilizing fissionable material or atomic energy as a military weapon, or by a fine of not more than \$10,000 or by imprisonment for not more than 5 years, or both in the case of other offenses.

Subsection (c) authorizes the Commission to apply to the courts for appropriate orders to enforce compliance with the provisions of the act.

Subsection (d) gives jurisdiction to the district courts to require individuals to appear and give testimony or to appear and produce documents, or both, in accordance with subpoenas issued by the Commission.

Subsection (e) requires that all violations of the legislation be investigated by the Federal Bureau of Investigation of the Department of Justice.

Section 17. Reports

This section requires the Commission to submit semiannual reports to the Congress and to make such recommendations for additional legislation as the Commission deems necessary or desirable.

Section 18. Definitions

The definitions contained in this section are set forth above.

Section 19. Appropriations

This section authorizes appropriations and provides for transfer of funds from the Manhattan Engineer District to the Commission for Expenditure to carry out the provisions of this act.

Section 20. Separability of provisions

This section contains the usual separability provision.

Section 21. Short title

This section provides that the act may be cited as the "Atomic Energy Act of 1946".

MINORITY VIEWS

The patent provisions in section 11 represent a revolutionary change from our present patent system—a change not necessary to provide the protection against the misuse of atomic energy which this bill proposes to guard. It is consequently believed that this section has no place in this bill for, under the guise of providing protection, fundamental changes are proposed for this system. The section provides that—

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material—

and

Any patent granted for any such invention or discovery is hereby revoked and just compensation shall be made therefor.

Furthermore:

No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon.

In this connection it should be noted that—

Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked * * * and just compensation shall be made therefor.

It is thus to be seen that both with respect to the production of fissionable material and utilization of fissionable material for use as a military weapon present patents are to be revoked and no patents can be granted in the future in these fields.

It is contended by advocates of this proposed legislation that private patents can play no role in the field of activity reserved exclusively for the Government; that for this reason, and to eliminate risk of disclosure of restricted information which would be certain to arise under normal patent procedure, invention and discovery in these fields should not be patentable matter.

We note in this connection that the fields of activity reserved by the bill for exclusive development by the Government is not limited to the production of military weapons, but includes any utilization of fissionable and radioactive materials for medical and biological uses as well as for all other purposes, including industrial uses. Section 11 (b) specifically provides:

No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3—

and that section 3 includes research in—

(1) nuclear processes; (2) the theory and production of atomic energy, including processes, materials, and devices related to such production; and * * *
(4) utilization of fissionable and radioactive materials and processes entailed in

the production of such materials for all other purposes, including industrial uses
* * *

By these provisions notice is served on private inventors and privately financed research workers and educational institutions not only of this country but also of the entire world that they are precluded from patenting anything done by them in these fields, no matter how remotely it may be related to the national defense or security. This, in our opinion, would effectively discourage the making of inventions for the industrial utilization of atomic energy by private initiative, enterprise, and capital, and the adoption of such a policy will result in industrial stagnation if the utilization of atomic energy for industrial power purposes can be realized.

As we view it, the bill in this respect endeavors to substitute Federal control and development of inventions for all purposes in this new field for private control. It is the view of the minority members of the committee that this country is not prepared either by tradition or experience to launch upon this form of state socialism.

Up to the present time, some of the most important inventions used only or largely for governmental purposes, including military weapons have been developed by independent inventors, under a patent system which has proven to be advantageous to both the Government and private inventors. Hundreds of inventions used in the development of the atomic bomb had previously been made by private inventors.

Full secrecy can be preserved without modification of our patent laws and few such inventions will be produced if the incentives to produce them are destroyed. No departure from our historic patent policies are necessary for security purposes, and no such proposal was either advocated or adopted during the recent period of hostilities. Ample security is possible, and was secured during the war period, without departing from any of our established fundamental patent practices (from the testimony, before the Military Affairs Committee, of Conder C. Henry, Assistant Commissioner of Patents during World War II).

To take the place of the incentives offered by the patent system, it is proposed that in the case of an invention which has not already been patented, the inventor file a report with the Commission and further, upon application to the Commission, he may receive an "award" for his invention.

Just how the Patent's Compensation Board is to evaluate inventions is not made clear. Previous experience has shown how often it is impossible to appreciate an invention at the time it is made. For example, the telephone during its early stages was regarded as a mere toy. Even the first automobiles or "horseless" carriages were thought of as follies. A compensation board would undoubtedly have viewed these important inventions as unworthy of an award.

It is readily apparent that an "award", which is very much like the practice in Russia, is not as satisfactory an incentive as the present system of granting patents.

Under the present system, should the Government desire to use an invention it can do so either by acquiring a nonexclusive license from the inventor or by exercising its right of eminent domain and leaving the inventor to bring suit in the Court of Claims for his just compensation.

The bill further provides that inventions to the extent used in the conduct of research or development activities, in certain specified fields are also not patentable and to the extent that patent rights

have already been conferred these also are to be revoked, with just compensation paid therefor.

With respect to research, there is no provision for any form of reward for future inventions in the field specified. These fields appear to include everything in the universe in view of the broad definition of "atomic energy" contained in the bill.

The Secretary of State's report on the International Control of Atomic Energy explained that—

almost all sources of energy used on earth come to us from the sunlight which this great atomic energy plant provides.

Even if the specified fields are limited to man-made production of atomic energy the provisions of the bill are too sweeping.

It must be remembered that many important industries are engaged in the production and sale of research instruments and the bill would prohibit the granting of patents in the future for such inventions while it would also revoke the patent protection that has already been granted. The net result would be to place these very important types of inventions in a position of not having patent protection with consequent destruction of the incentive of inventors as well as of industry to spend the time and money in the development and commercialization of instruments vitally necessary to research and development work.

In stating that—

any rights conferred by any patent heretofore granted * * * are hereby revoked * * *

the framers of the bill apparently contemplated canceling these rights on the assumption that they then can revert to the Government.

But, what happens when a patent is thus canceled? And can the rights of a patent owner, once granted, be withdrawn at will?

SECTION 11 IS UNCONSTITUTIONAL

In *Solomons v. United States* (137 U. S. 342, 346) it was said:

The Government has no more power to appropriate a man's property invested in a patent than it has to take his property invested in real estate * * *.

It has thus been long established that patents are property and, while there have been many attempts to assert that a patent is something taken from the public domain and granted by the Government as a matter of grace to the patentee, this idea was exploded when Mr. Justice Brewer compared a patent for invention with a patent for land.

In *United States v. American Bell Tel. Co.* ((1897) 167 U. S. 224, 238), he stated:

Many cases have come to this Court, in which patents for lands have been sought to be set aside * * * it may be well to note the differences between patents for land and patents for inventions. While the same term is used, the same grantor is in each, and although each vests in the patentee certain rights, yet they are not in all things alike. The patent for land is a conveyance to an individual of that which is the absolute property of the Government and to which, but for the conveyance, the individual would have no right or title. It is a transfer of tangible property; of property in existence before the right is conveyed; of property which the Government has the full right to dispose of as it sees fit, and may retain to itself or convey to one individual or another; and it creates a title which lasts for all time. On the other hand, the patent for an invention is not a conveyance of something which the Government owns. It does

not convey that which, but for the conveyance, the Government could use and dispose of as it sees fit, and in which no one save the Government has any right or title except for the conveyance. But for the patent the thing patented is open to the use of any one. Were it not for this patent any one would have the right to manufacture and use the Berliner transmitter. It was not something which belonged to the Government before Berliner invented it. * * * It conveyed to Berliner, so far as respects rights in the instrument itself, nothing that he did not have theretofore. The only effect of it was to restrain others from manufacturing and using that which he invented. After his invention he could have kept the discovery secret to himself. He need not have disclosed it to anyone. But in order to induce him to make that invention public, to give all a share in the benefits resulting from such an invention, Congress, by its legislation, made in pursuance of the Constitution, has guaranteed to him an exclusive right to it for a limited time; and the purpose of the patent is to protect him in this monopoly, not to give him a use which, save for the patent, he did not have before, but only to separate to him an exclusive use. The Government parted with nothing by the patent. It lost no property. Its possessions were not diminished. The patentee, so far as a personal use is concerned, received nothing which he did not have without the patent, and the monopoly which he did receive was only for a few years. So the Government may well insist that it has higher rights in a suit to set aside a patent for an invention. There are weightier reasons why the Government should not be permanently deprived of its property through fraudulent representations or other wrongful means, than there are for questioning the validity of a temporary monopoly or depriving an individual of the exclusive use for a limited time of that whose actual use he claims to have made possible, and which, after such time, will be open and free to all.

Furthermore, Chief Justice Marshall, in discussing patents in 6 Peters 217, 241-242 stated that—

It is the reward stipulated for the advantages derived by the public for the exertions of the individual, and is intended as a stimulus to those exertions * * * the public yields nothing which it has not agreed to yield; it receives all that it has contracted to receive. The full benefit of the discovery after its enjoyment by the discoverer for 14 (now 17) years, is preserved; and for his exclusive enjoyment of it during that time the public faith is pledged.

Consequently in connection with patents that have already been granted, the patentee has properly met his part of the bargain by disclosing his knowledge. It is now for the public working through the Government to keep its part of the bargain, namely, to continue to give the patentee the exclusive right to exclude all others from manufacturing, using, or selling his invention for the balance of the term that had been agreed upon.

Chief Justice White summed up the matter when, in 1918, in a case involving the interpretation of the act of 1910 authorizing the United States, but not its contractor, to engage in the unlicensed use of patents, he declared:

At the time of the enactment of the law of 1910 the following principles were so indisputably established as to need no review of the authorities sustaining them, although the leading cases as to all the propositions are referred to in the margin.

(a) That rights secured under the grant of letters patent by the United States were property and protected by the guaranties of the Constitution, and not subject therefore to be appropriated even for public use without adequate compensation (Chief Justice White in *Cramp & Sons S. & E. B. Co. v. Intl. Curtis M. T. Co.*, 246 U. S. 39-40).

Since the patentee has received nothing which he did not have without the patent, the Government has not given up property but has merely granted an exclusive right in return for the disclosure of information. The cancellation of this right would not give the Government a patent, but on the contrary it would remove the incentive upon the part of inventors to disclose information of which they are possessed.

The courts recognize the validity of a patent right as a property right; and the cancellation of such a right once granted represents an unconstitutional deprivation of property.

The bill further provides for compulsory licensing in that—

It shall be the duty of the Commission to declare any patent to be affected with the public interest if (A) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy; and (B) the licensing of such invention or discovery under this subsection is necessary to effectuate the policies and purposes of this Act.

Here also this provision is so broad as to cover practically everything.

The bill also provides that the Commission is licensed to use the invention or discovery covered by the patent which it has declared to be affected with the public interest in performing any of its powers under the act; further any person to whom a license has been issued under section 7 is licensed to use the invention or discovery to the extent that he uses it in carrying out the activities authorized by his license under section 7.

This latter section, exclusive of research and development activities, provides for the Commission to grant applicants a license—

to manufacture any equipment or device utilizing fissionable material or atomic energy or to utilize fissionable material or atomic energy with or without such equipment or device.

The purpose of this provision is to provide for compulsory licensing for all industrial uses of fissionable materials.

Suggestions for compulsory licensing have been made previously from time to time but testimony in hearings has been overwhelmingly to the effect that it would be fatal to numerous small enterprises and that the protection afforded by the exclusive right granted by the patent right is needed by business, large and small, to prosper.

Section 7 is especially objectionable since it also includes "atomic energy" which, as already stated, practically covers all industries.

With respect to compulsory licensing of patents already issued the provision amounts to confiscation of private property. The provision ignores completely the constitutional prohibition against the taking of private property except "by due process of law" or for "public use." Compulsory licensing of patents already issued has generally been regarded as unconstitutional confiscation of private property and counter to article 5 of the Bill of Rights.

In the now famous Hartford-Empire case (1944) although the company violated the Antitrust Act and was enjoined from future violations, the Supreme Court refused to sustain any part of the decree which, in effect, confiscated the valid patents involved, saying—

That a patent is property protected against appropriation both by individuals and by Government has long been settled. In recognition of this quality of a patent, the courts, in enjoining violation of the Sherman Act arising from the use of patent licenses, agreements, and leases, have abstained from action which amounted to a forfeiture of the patents (*Hartford Empire Company v. United States*, 323 U. S. 415).

With respect to the compulsory licensing of future patents also envisioned under this bill, it is questionable whether Congress has the authority to grant other than the exclusive right. Article I, section 8, clause 8, of the Constitution provides—

the Congress shall have * * * power to promote the program of science and useful arts by securing for limited times for authors and inventors the *exclusive right* to their respective writings and discoveries. [Italics ours.]

The purpose of promoting the program of science and useful arts is therefore a fundamental policy of our Government. Otherwise, it would not be found in the Constitution. It will thus be seen that the bill contains revolutionary changes in the patent-policy system which are in conflict with the purpose of the Constitution and which tend to eliminate the private-patent system.

And these changes are currently motivated by the desire to make certain that the United States continues to maintain its preeminent position in this as it has in the other industrial fields. The philosophy behind the changes suggested seems to be that the Government would secure both the ideas and secrecy by doing away with patents in this important field of activity.

But is this true? In the case of patents already issued, the ideas are disclosed (unless, for military reasons of security, they are on the secret list).

In the case of future patents, we must remember that an undisclosed idea in the mind of an inventor helps no one and he will be reluctant to disclose it unless he can obtain suitable remuneration. Foreign countries are also aware of this, and the elimination of the patentability of ideas in this field might well lead to espionage, secret bidding, et cetera, beyond the wildest dreams of any mystery writer or movie-picture producer.

With the idea locked up in his mind, the inventor need not disclose it—there is no method to compel him to do so, and no way to know even that he has the idea. The United States then might or might not acquire the idea. It might die with the inventor, or go to a foreign country.

However, if it is patented, the idea is disclosed and thus available for use. If national security requires that it be placed on the secret list, the Government can buy it as it can any other property but the inventor has the incentive to disclose his idea, and others can build on that.

It is therefore believed that this section 11 would hinder rather than help in the development of atomic energy and should be omitted from this bill.

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79TH CONGRESS
2D SESSION

S. 1717

[Report No. 2478]

IN THE HOUSE OF REPRESENTATIVES

JUNE 5, 1946

Referred to the Committee on Military Affairs

JULY 10, 1946

Reported with amendments, committed to the Committee of the Whole House
on the State of the Union, and ordered to be printed

[Omit the part struck through and insert the part printed in italic]

AN ACT

For the development and control of atomic energy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 DECLARATION OF POLICY

4 SECTION 1. (a) FINDINGS AND DECLARATION.—Re-
5 search and experimentation in the field of nuclear chain
6 reaction have attained the stage at which the release of
7 atomic energy on a large scale is practical. The sig-
8 nificance of the atomic bomb for military purposes is evident.
9 The effect of the use of atomic energy for civilian purposes
10 upon the social, economic, and political structures of today
11 cannot now be determined. It is a field in which unknown

1 factors are involved. Therefore, any legislation will neces-
2 sarily be subject to revision from time to time. It is rea-
3 sonable to anticipate, however, that tapping this new source
4 of energy will cause profound changes in our present way
5 of life. Accordingly, it is hereby declared to be the policy
6 of the people of the United States that, subject at all
7 times to the paramount objective of assuring the common
8 defense and security, the development and utilization of
9 atomic energy shall, so far as practicable, be directed to-
10 ward improving the public welfare, increasing the standard
11 of living, strengthening free competition in private enter-
12 prise, and promoting world peace.

13 (b) PURPOSE OF ACT.—It is the purpose of this Act to
14 effectuate the policies set out in section 1 (a) by providing,
15 among others, for the following major programs relating to
16 atomic energy:

17 (1) A program of assisting and fostering private re-
18 search and development to encourage maximum scientific
19 progress;

20 (2) A program for the control of scientific and technical
21 information which will permit the dissemination of such in-
22 formation to encourage scientific progress, and for the sharing
23 on a reciprocal basis of information concerning the practical
24 industrial application of atomic energy as soon as effective

1 and enforceable safeguards against its use for destructive
2 purposes can be devised;

3 (3) A program of federally conducted research and
4 development to assure the Government of adequate scientific
5 and technical accomplishment;

6 (4) A program for Government control of the produc-
7 tion, ownership, and use of fissionable material to assure
8 the common defense and security and to insure the broadest
9 possible exploitation of the field; and

10 (5) A program of administration which will be con-
11 sistent with the foregoing policies and with international
12 arrangements made by the United States, and which will
13 enable the Congress to be currently informed so as to take
14 further legislative action as may hereafter be appropriate.

15 ORGANIZATION

16 SEC. 2. (a) ATOMIC ENERGY COMMISSION.—

17 (1) There is hereby established an Atomic Energy
18 Commission (herein called the Commission), which shall be
19 composed of five members, *at least one of whom shall be a*
20 *representative of the armed forces.* Three members shall con-
21 stitute a quorum of the Commission. The President shall
22 designate one member as Chairman of the Commission.

23 (2) Members of the Commission shall be appointed by
24 the President, by and with the advice and consent of the

1 Senate. In submitting any nomination to the Senate, the
2 President shall set forth the experience and the qualifications
3 of the nominee. The term of office of each member of the
4 Commission taking office prior to the expiration of two years
5 after the date of enactment of this Act shall expire upon the
6 expiration of such two years. The term of office of each
7 member of the Commission taking office after the expiration
8 of two years from the date of enactment of this Act shall be
9 five years, except that (A) the terms of office of the mem-
10 bers first taking office after the expiration of two years from
11 the date of enactment of this Act shall expire, as designated
12 by the President at the time of appointment, one at the end
13 of three years, one at the end of four years, one at the end
14 of five years, one at the end of six years, and one at the
15 end of seven years, after the date of enactment of this Act;
16 and (B) any member appointed to fill a vacancy occurring
17 prior to the expiration of the term for which his predecessor
18 was appointed, shall be appointed for the remainder of such
19 term. Any member of the Commission may be removed by
20 the President for inefficiency, neglect of duty, or malfeasance
21 in office. Each member, except the Chairman, shall receive
22 compensation at the rate of \$15,000 per annum; and the
23 Chairman shall receive compensation at the rate of \$17,500
24 per annum. No member of the Commission shall engage in

1 any other business, vocation, or employment than that of
2 serving as a member of the Commission.

3 (3) The principal office of the Commission shall be in
4 the District of Columbia, but the Commission or any duly
5 authorized representative may exercise any or all of its pow-
6 ers in any place. The Commission shall hold such meetings,
7 conduct such hearings, and receive such reports as may be
8 necessary to enable it to carry out the provisions of this Act.

9 (4) There are hereby established within the Com-
10 mission—

11 (A) a General Manager, who shall discharge such
12 of the administrative and executive functions of the
13 Commission as the Commission may direct. The Gen-
14 eral Manager shall be appointed by the President by
15 and with the advice and consent of the Senate, and shall
16 receive compensation at the rate of \$15,000 per annum.
17 The Commission may make recommendations to the
18 President with respect to the appointment or removal of
19 the General Manager.

20 (B) a Division of Research, a Division of Pro-
21 duction, a Division of Engineering, and a Division of
22 Military Application. Each division shall be under the
23 direction of a Director who shall be appointed by the
24 Commission, and shall receive compensation at the rate

1 of \$14,000 per annum. *The Director of the Division of*
2 *Military Application shall be a representative of the*
3 *armed forces.* The Commission shall require each such
4 division to exercise such of the Commission's powers
5 under this Act as the Commission may determine, except
6 that the authority granted under section 3 (a) of this
7 Act shall not be exercised by the Division of Research.

8 (b) GENERAL ADVISORY COMMITTEE.—There shall be
9 a General Advisory Committee to advise the Commission on
10 scientific and technical matters relating to materials, produc-
11 tion, and research and development, to be composed of nine
12 members, who shall be appointed from civilian life by the
13 President. Each member shall hold office for a term of six
14 years, except that (1) any member appointed to fill a
15 vacancy occurring prior to the expiration of the term for
16 which his predecessor was appointed, shall be appointed for
17 the remainder of such term; and (2) the terms of office of the
18 members first taking office after the date of the enactment
19 of this Act shall expire, as designated by the President at
20 the time of appointment, three at the end of two years, three
21 at the end of four years, and three at the end of six years,
22 after the date of the enactment of this Act. The Committee
23 shall designate one of its own members as Chairman. The
24 Committee shall meet at least four times in every calendar
25 year. The members of the Committee shall receive a per

1 diem compensation of \$50 for each day spent in meetings or
2 conferences, and all members shall receive their necessary
3 traveling or other expenses while engaged in the work of
4 the Committee.

5 (c) MILITARY LIAISON COMMITTEE.—There shall be
6 a Military Liaison Committee consisting of representatives
7 of the Departments of War and Navy, detailed or assigned
8 thereto, without additional compensation, by the Secretaries
9 of War and Navy in such number as they may determine.
10 The Commission shall advise and consult with the Committee
11 on all atomic energy matters which the Committee deems to
12 relate to military applications, including the development,
13 manufacture, use, and storage of bombs, the allocation of
14 fissionable material for military research, and the control
15 of information relating to the manufacture or utilization of
16 atomic weapons. The Commission shall keep the Committee
17 fully informed of all such matters before it and the Com-
18 mittee shall keep the Commission fully informed of all atomic
19 energy activities of the War and Navy Departments. The
20 Committee shall have authority to make written recommen-
21 dations to the Commission on matters relating to military
22 applications from time to time as it may deem appropriate.
23 If the Committee at any time concludes that any action,
24 proposed action, or failure to act of the Commission on such
25 matters is adverse to the responsibilities of the Departments

1 of War or Navy, derived from the Constitution, laws, and
 2 treaties, the Committee may refer such action, proposed
 3 action, or failure to act to the Secretaries of War and Navy.
 4 If either Secretary concurs, he may refer the matter to the
 5 President, whose decision shall be final.

6 (d) *APPOINTMENT OF ARMY AND NAVY OFFICERS.—*
 7 *Notwithstanding the provisions of section 1222 of the Re-*
 8 *vised Statutes (U. S. C., 1940 edition, title 10, sec. 576),*
 9 *section 212 of the Act entitled “An Act making appropri-*
 10 *ations for the Legislative Branch of the Government for*
 11 *the fiscal year ending June 30, 1933, and for other pur-*
 12 *poses”, approved June 30, 1932, as amended (U. S. C.,*
 13 *1940 edition, title 5, sec. 59a), section 2 of the Act entitled*
 14 *“An Act making appropriations for the legislative, executive,*
 15 *and judicial expenses of the Government for the fiscal year*
 16 *ending June thirtieth, eighteen hundred and ninety-five, and*
 17 *for other purposes”, approved July 31, 1894, as amended*
 18 *(U. S. C., 1940 edition, title 5, sec. 62), or any other law,*
 19 *not to exceed two active or retired officers of the Army or*
 20 *the Navy may serve at the same time as members of the*
 21 *Commission, and any active or retired officer of the Army*
 22 *or the Navy may serve as Director of the Division of Mili-*
 23 *tary Application established by subsection (a) (4) (B) of*
 24 *this section, without prejudice to their commissioned status*
 25 *as such officers. Any such officer serving as a member of*

1 *the Commission or as Director of the Division of Military*
 2 *Application shall receive, in addition to his pay from the*
 3 *United States as such officer, an amount equal to the differ-*
 4 *ence between such pay and the compensation prescribed in*
 5 *paragraph (2) or (4) (B), as the case may be, of sub-*
 6 *section (a) of this section.*

7 RESEARCH

8 SEC. 3. (a) RESEARCH ASSISTANCE.—The Commis-
 9 sion is directed to exercise its powers in such manner as
 10 to insure the continued conduct of research and develop-
 11 ment activities in the fields specified below by private or
 12 public institutions or persons and to assist in the acquisi-
 13 tion of an ever-expanding fund of theoretical and prac-
 14 tical knowledge in such fields. To this end the Commission
 15 is authorized and directed to make arrangements (including
 16 contracts, agreements, grants-in-aid, and loans) for the con-
 17 duct of research and development activities relating to—

18 (1) nuclear processes;

19 (2) the theory and production of atomic energy,
 20 including processes, materials, and devices related to
 21 such production;

22 (3) utilization of fissionable and radioactive ma-
 23 terials for medical, biological, health, or military pur-
 24 poses;

1 (4) utilization of fissionable and radioactive ma-
2 terials and processes entailed in the production of such
3 materials for all other purposes, including industrial
4 uses; and

5 (5) the protection of health during research and
6 production activities.

7 The Commission may make such arrangements without re-
8 gard to the provisions of section 3709 of the Revised
9 Statutes (U. S. C., title 41, sec. 5) upon certification by
10 the Commission that such action is necessary in the interest
11 of the common defense and security, or upon a showing
12 that advertising is not reasonably practicable, and may
13 make partial and advance payments under such arrange-
14 ments, and may make available for use in connection there-
15 with such of its equipment and facilities as it may deem
16 desirable. Such arrangements shall contain such provisions
17 to protect health, to minimize danger from explosion and
18 other hazards to life or property, and to require the report-
19 ing and to permit the inspection of work performed there-
20 under, as the Commission may determine; but shall not
21 contain any provisions or conditions which prevent the
22 dissemination of scientific or technical information, except
23 to the extent such dissemination is prohibited by law.

24 (b) RESEARCH BY THE COMMISSION.—The Commis-
25 sion is authorized and directed to conduct, through its own

1 facilities, activities and studies of the types specified in sub-
2 section (a) above.

3 PRODUCTION OF FISSIONABLE MATERIAL

4 SEC. 4. (a) DEFINITION.—As used in this Act, the
5 term “produce”, when used in relation to fissionable material,
6 means to manufacture, produce, or refine fissionable material,
7 as distinguished from source materials as defined in section
8 5 (b) (1), or to separate fissionable material from other
9 substances in which such material may be contained or to
10 produce new fissionable material.

11 (b) PROHIBITION.—It shall be unlawful for any person
12 to own any facilities for the production of fissionable material
13 or for any person to produce fissionable material, except to
14 the extent authorized by subsection (c).

15 (c) OWNERSHIP AND OPERATION OF PRODUCTION
16 FACILITIES.—

17 (1) OWNERSHIP OF PRODUCTION FACILITIES.—

18 The Commission shall be the exclusive owner of all
19 facilities for the production of fissionable material other
20 than facilities which (A) are useful in the conduct of
21 research and development activities in the fields speci-
22 fied in section 3, and (B) do not, in the opinion of
23 the Commission, have a potential production rate ade-
24 quate to enable the operator of such facilities to produce
25 within a reasonable period of time a sufficient quantity

1 of fissionable material to produce an atomic bomb or
2 any other atomic weapon.

3 (2) OPERATION OF THE COMMISSION'S PRODUCTION
4 FACILITIES.—The Commission is authorized and
5 directed to produce or to provide for the production of
6 fissionable material in its own facilities. To the extent
7 deemed necessary, the Commission is authorized to make,
8 or to continue in effect, contracts with persons obligating
9 them to produce fissionable material in facilities
10 owned by the Commission. The Commission is also
11 authorized to enter into research and development contracts
12 authorizing the contractor to produce fissionable
13 material in facilities owned by the Commission to the
14 extent that the production of such fissionable material
15 may be incident to the conduct of research and development
16 activities under such contracts. Any contract
17 entered into under this section shall contain provisions
18 (A) prohibiting the contractor with the Commission
19 from subcontracting any part of the work he is obligated
20 to perform under the contract, *except as authorized*
21 *by the Commission*, and (B) obligating the contractor
22 to make such reports to the Commission as it
23 may deem appropriate with respect to his activities
24 under the contract, to submit to frequent inspection by
25 employees of the Commission of all such activities, and

to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) OPERATION OF OTHER PRODUCTION FACILITIES.—Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) IRRADIATION OF MATERIALS.—For the purpose of increasing the supply of radioactive materials, the Commission is *and persons performing pursuant to section 3 (a), section 4 (c) (1) (A) and (B), or section 7* are authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

(e) MANUFACTURE OF PRODUCTION FACILITIES.—Unless authorized by a license issued by the Commission, no

1 person may manufacture, produce, transfer, or acquire any
2 facilities for the production of fissionable material. Licenses
3 shall be issued in accordance with such procedures as the
4 Commission may by regulation establish and shall be issued in
5 accordance with such standards and upon such conditions as
6 will restrict the production and distribution of such facilities
7 to effectuate the policies and purposes of this Act. Nothing
8 in this section shall be deemed to require a license for such
9 manufacture, production, transfer, or acquisition incident to
10 or for the conduct of research or development activities in the
11 United States of the types specified in section 3, or to prohibit
12 the Commission from manufacturing or producing such facil-
13 ities for its own use.

14 CONTROL OF MATERIALS

15 SEC. 5. (a) FISSIONABLE MATERIALS.—

16 (1) DEFINITION.—As used in this Act, the term “fis-
17 sionable material” means plutonium, uranium enriched in the
18 isotope 235, any other material which the Commission
19 determines to be capable of releasing substantial quantities
20 of energy through nuclear chain reaction of the material, or
21 any material artificially enriched by any of the foregoing;
22 but does not include source materials, as defined in section
23 5 (b) (1).

24 (2) GOVERNMENT OWNERSHIP OF ALL FISSIONABLE
25 MATERIAL.—All right, title, and interest within or under

1 the jurisdiction of the United States, in or to any fissionable
2 material, now or hereafter produced, shall be the property
3 of the Commission, and shall be deemed to be vested in
4 the Commission by virtue of this Act. Any person owning
5 any interest in any fissionable material at the time of the
6 enactment of this Act, or owning any interest in any ma-
7 terial at the time when such material is hereafter determined
8 to be a fissionable material, or who lawfully produces any
9 fissionable material incident to privately financed research
10 or development activities, shall be paid just compensation
11 therefor. The Commission may, by action consistent with
12 the provisions of paragraph (4) below, authorize any such
13 person to retain possession of such fissionable material, but
14 no person shall have any title in or to any fissionable material.

15 (3) PROHIBITION.—It shall be unlawful for any person,
16 after sixty days from the effective date of this Act to (A)
17 possess or transfer any fissionable material, except as author-
18 ized by the Commission, or (B) export from or import into
19 the United States any fissionable material, or (C) directly
20 or indirectly engage in the production of any fissionable
21 material outside of the United States.

22 (4) DISTRIBUTION OF FISSIONABLE MATERIAL.—
23 Without prejudice to its continued ownership thereof, the
24 Commission is authorized to distribute fissionable material,
25 with or without charge, to applicants requesting such material

1 (A) for the conduct of research or development activities
2 either independently or under contract or other arrangement
3 with the Commission, (B) for use in medical therapy, or
4 (C) for use pursuant to a license issued under the authority
5 of section 7. Such material shall be distributed in such
6 quantities and on such terms that no applicant will be en-
7 abled to obtain an amount sufficient to construct a bomb
8 or other military weapon. The Commission is directed to
9 distribute sufficient fissionable material to permit the con-
10 duct of widespread independent research and development
11 activity, to the maximum extent practicable. In deter-
12 mining the quantities of fissionable material to be distributed,
13 the Commission shall make such provisions for its own needs
14 and for the conservation of fissionable material as it may
15 determine to be necessary in the national interest for the
16 future development of atomic energy. The Commission shall
17 not distribute any material to any applicant, and shall recall
18 any distributed material from any applicant, who is not
19 equipped to observe or who fails to observe such safety
20 standards to protect health and to minimize danger from
21 explosion or other hazard to life or property as may be
22 established by the Commission, or who uses such material
23 in violation of law or regulation of the Commission or in a
24 manner other than as disclosed in the application therefor.
25 (5) The Commission is authorized to purchase or other-

1 wise acquire any fissionable material or any interest therein
2 outside the United States, or any interest in facilities for the
3 production of fissionable material, or in real property on
4 which such facilities are located, without regard to the pro-
5 visions of section 3709 of the Revised Statutes (U. S. C.,
6 title 41, sec. 5) upon certification by the Commission that
7 such action is necessary in the interest of the common defense
8 and security, or upon a showing that advertising is not rea-
9 sonably practicable, and partial and advance payments may
10 be made under contracts for such purposes. The Commis-
11 sion is further authorized to take, requisition, or condemn,
12 or otherwise acquire any interest in such facilities or real
13 property, and just compensation shall be made therefor.

14 (b) SOURCE MATERIALS.—

15 (1) DEFINITION.—As used in this Act, the term
16 “source material” means uranium, thorium, or any other
17 material which is determined by the Commission, with
18 the approval of the President, to be peculiarly essential to
19 the production of fissionable materials; but includes ores
20 only if they contain one or more of the foregoing materials
21 in such concentration as the Commission may by regulation
22 determine from time to time.

23 (2) LICENSE FOR TRANSFERS REQUIRED.—Unless
24 authorized by a license issued by the Commission, no person

1 may transfer or deliver and no person may receive possession
2 of or title to any source material after removal from its place
3 of deposit in nature, except that licenses shall not be required
4 for quantities of source materials which, in the opinion of the
5 Commission, are unimportant.

6 (3) ISSUANCE OF LICENSES.—The Commission shall
7 establish such standards for the issuance, refusal, or revoca-
8 tion of licenses as it may deem necessary to assure adequate
9 source materials for production, research, or development
10 activities pursuant to this Act or to prevent the use of such
11 materials in a manner inconsistent with the national welfare.
12 Licenses shall be issued in accordance with such procedures
13 as the Commission may by regulation establish.

14 (4) REPORTING.—The Commission is authorized to
15 issue such regulations or orders requiring reports of owner-
16 ship, possession, extraction, refining, shipment, or other han-
17 dling of source materials as it may deem necessary, except
18 that such reports shall not be required with respect to (A)
19 any source material prior to removal from its place of deposit
20 in nature, or (B) quantities of source materials which in the
21 opinion of the Commission are unimportant or the reporting
22 of which will discourage independent prospecting for new
23 deposits.

24 (5) ACQUISITION.—The Commission is authorized and
25 directed to purchase, take, requisition, condemn, or otherwise

1 acquire, supplies of source materials or any interest in real
2 property containing deposits of source materials to the extent
3 it deems necessary to effectuate the provisions of this Act.
4 Any purchase made under this paragraph may be made
5 without regard to the provisions of section 3709 of the Re-
6 vised Statutes (U. S. C., title 41, sec. 5) upon certification
7 by the Commission that such action is necessary in the
8 interest of the common defense and security, or upon a show-
9 ing that advertising is not reasonably practicable, and partial
10 and advance payments may be made thereunder. The Com-
11 mission may establish guaranteed prices for all source mate-
12 rials delivered to it within a specified time. Just compensa-
13 tion shall be made for any property taken, requisitioned, or
14 condemned under this paragraph.

15 (6) EXPLORATION.—The Commission is authorized to
16 conduct and enter into contracts for the conduct of exploratory
17 operations, investigations, and inspections to determine the
18 location, extent, mode of occurrence, use, or conditions of
19 deposits or supplies of source materials, making just compen-
20 sation for any damage or injury occasioned thereby. Such
21 exploratory operations may be conducted only with the
22 consent of the owner, but such investigations and inspections
23 may be conducted with or without such consent.

24 (7) PUBLIC LANDS.—All uranium, thorium, and all
25 other materials determined pursuant to paragraph (1) of

1 this subsection to be peculiarly essential to the production of
2 fissionable material, contained, in whatever concentration, in
3 deposits in the public lands are hereby reserved for the use
4 of the United States; except that with respect to any location,
5 entry, or settlement made prior to the date of enactment of
6 this Act no reservation shall be deemed to have been made,
7 if such reservation would deprive any person of any existing
8 or inchoate rights or privileges to which he would otherwise
9 be entitled or would otherwise enjoy: *Provided, however,*
10 That no ~~person~~ *individual*, corporation, partnership, or asso-
11 ciation, which had any part, directly or indirectly, in the
12 development of the atomic bomb project, may benefit by any
13 location, entry, or settlement upon the public domain made
14 after such ~~person~~ *individual*, corporation, partnership, or
15 association took part in such project *unless first authorized so*
16 *to do by the Commission.* The Secretary of the Interior shall
17 cause to be inserted in every patent, conveyance, lease, per-
18 mit, or other authorization hereafter granted to use the public
19 lands or their mineral resources, under any of which there
20 might result the extraction of any materials so reserved, a
21 reservation to the United States of all such materials, whether
22 or not of commercial value, together with the right of
23 the United States through its authorized agents or repre-
24 sentatives at any time to enter upon the land and prospect
25 for, mine, and remove the same, making just compen-

1 sation for any damage or injury occasioned thereby. Any
2 lands so patented, conveyed, leased, or otherwise disposed of
3 may be used, and any rights under any such permit or
4 authorization may be exercised, as if no reservation of such
5 materials had been made under this subsection; except that,
6 when such use results in the extraction of any such material
7 from the land in quantities which may not be transferred or
8 delivered without a license under this subsection, such ma-
9 terial shall be the property of the Commission and the Com-
10 mission may require delivery of such material to it by any
11 possessor thereof after such material has been separated as
12 such from the ores in which it was contained. If the Com-
13 mission requires the delivery of such material to it, it shall
14 pay to the person mining or extracting the same, or to
15 such other person as the Commission determines to be
16 entitled thereto, such sums, including profits, as the Com-
17 mission deems fair and reasonable for the discovery, mining,
18 development, production, extraction, and other services per-
19 formed with respect to such material prior to such delivery,
20 but such payment shall not include any amount on account
21 of the value of such material before removal from its place
22 of deposit in nature. If the Commission does not require
23 delivery of such material to it, the reservation made pur-
24 suant to this paragraph shall be of no further force or effect.

25 (c) BYPRODUCT MATERIALS.—

1 (1) DEFINITION.—As used in this Act, the term
 2 “byproduct material” means any radioactive material (ex-
 3 cept fissionable material) yielded in or made radioactive by
 4 exposure to the radiation incident to the processes of produc-
 5 ing or utilizing fissionable material.

6 (2) DISTRIBUTION.—The Commission is authorized
 7 to distribute, with or without charge, byproduct materials
 8 to applicants seeking such materials for research or develop-
 9 ment activity, medical therapy, industrial uses, or such other
 10 useful applications as may be developed. In distributing
 11 such materials, the Commission shall give preference to
 12 applicants proposing to use such materials in the conduct of
 13 research and development activity or medical therapy. The
 14 Commission shall not distribute any byproduct materials to
 15 any applicant, and shall recall any distributed materials from
 16 any applicant, who is not equipped to observe or who fails
 17 to observe such safety standards to protect health as may be
 18 established by the Commission or who uses such materials
 19 in violation of law or regulation of the Commission or in a
 20 manner other than as disclosed in the application therefor.

21 (d) GENERAL PROVISIONS.—

22 (1) The Commission shall not distribute (A) any fis-
 23 sionable ~~or source~~ material to any person for a use which is
 24 not under or within the jurisdiction of the United States ~~or~~
 25 *States*, to any foreign government, *or to persons within the*

1 *jurisdiction of the United States where the distribution thereof*
2 *would be inimical to the common defense and security, or*
3 *(B) any source material, if, in the opinion of the Commission,*
4 *the distribution of such source material would be inimical*
5 *to the common defense and security.*

6 (2) The Commission shall establish by regulation a
7 procedure by which any person who is dissatisfied with
8 the distribution or refusal to distribute to him, or the recall
9 from him, of any fissionable or byproduct materials or with
10 the issuance, refusal, or revocation of a license to him for the
11 transfer or receipt of source materials may obtain a review
12 of such determination by a board of appeal consisting of three
13 members appointed by the Commission. The Commission
14 may in its discretion review and revise any decision of such
15 board of appeal.

16 MILITARY APPLICATIONS OF ATOMIC 17 ENERGY

18 SEC. 6. (a) AUTHORITY.—The Commission is author-
19 ized to—

20 (1) conduct experiments and do research and de-
21 velopment work in the military application of atomic
22 energy; and

23 (2) engage in the production of atomic bombs,
24 atomic bomb parts, or other military weapons utilizing
25 fissionable materials; except that such activities shall be

1 carried on only to the extent that the express consent
2 and direction of the President of the United States
3 has been obtained, which consent and direction shall
4 be obtained at least once each year.

5 The President from time to time may direct the Commission
6 (1) to deliver such quantities of *fissionable materials* or
7 weapons to the armed forces for such use as he deems neces-
8 sary in the interest of national defense or (2) to authorize
9 the armed forces to manufacture, produce, or acquire any
10 equipment or device utilizing *fissionable material* or atomic
11 energy as a military weapon.

12 (b) PROHIBITION.—It shall be unlawful for any per-
13 son, *except as provided in section 6 (a)*, to manufacture,
14 produce, transfer, or acquire any equipment or device utilizing
15 fissionable material or atomic energy as a military weapon,
16 except as may be authorized by the Commission. Nothing
17 in this subsection shall be deemed to modify the provisions
18 of section 4 of this Act, or to prohibit research activities
19 in respect of military weapons, or to permit the export of
20 any such equipment or device.

21 UTILIZATION OF ATOMIC ENERGY

22 SEC. 7. (a) LICENSE REQUIRED.—It shall be unlawful,
23 except as provided in sections 5 (a) (4) (A) or (B) or
24 6 (a), for any person to manufacture, produce, or export
25 any equipment or device utilizing fissionable material or

1 atomic energy or to utilize fissionable material or atomic
2 energy with or without such equipment or device, except
3 under and in accordance with a license issued by the Com-
4 mission authorizing such manufacture, production, export, or
5 utilization. No license may permit any such activity if fis-
6 sionable material is produced incident to such activity, except
7 as provided in sections 3 and 4. Nothing in this section
8 shall be deemed to require a license for the conduct of research
9 or development activities relating to the manufacture of such
10 equipment or devices or the utilization of fissionable material
11 or atomic energy, or for the manufacture or use of equipment
12 or devices for medical therapy.

13 (b) REPORT TO CONGRESS.—Whenever in its opinion
14 any industrial, commercial, or other nonmilitary use of fis-
15 sionable material or atomic energy has been sufficiently
16 developed to be of practical value, the Commission shall pre-
17 pare a report to the President stating all the facts with
18 respect to such use, the Commission's estimate of the social,
19 political, economic, and international effects of such use and
20 the Commission's recommendations for necessary or desirable
21 supplemental legislation. The President shall then transmit
22 this report to the Congress together with his recommenda-
23 tions. No license for any manufacture, production, export,
24 or use shall be issued by the Commission under this section

1 until after (1) a report with respect to such manufacture,
2 production, export, or use has been filed with the Congress;
3 and (2) a period of ninety days in which the Congress was
4 in session has elapsed after the report has been so filed. In
5 computing such period of ninety days, there shall be excluded
6 the days on which either House is not in session because of
7 an adjournment of more than three days.

8 (c) ISSUANCE OF LICENSES.—After such ninety-day
9 period, unless hereafter prohibited by law, the Commission
10 may license such manufacture, production, export, or use in
11 accordance with such procedures and subject to such condi-
12 tions as it may by regulation establish to effectuate the
13 provisions of this Act. The Commission is authorized and
14 directed to issue licenses on a nonexclusive basis and to
15 supply to the extent available appropriate quantities of
16 fissionable material to licensees (1) whose proposed activities
17 will serve some useful purpose proportionate to the quantities
18 of fissionable material to be consumed; (2) who are
19 equipped to observe such safety standards to protect health
20 and to minimize danger from explosion or other hazard to
21 life or property as the Commission may establish; and (3)
22 who agree to make available to the Commission such tech-
23 nical information and data concerning their activities pursu-
24 ant to such licenses as the Commission may determine neces-

1 sary to encourage similar activities by as many licensees as pos-
 2 sible. Each such license shall be issued for a specified period,
 3 not ~~to exceed~~ *less than* one year, shall be revocable at any
 4 time by the Commission in accordance with such procedures
 5 as the Commission may establish, and may be renewed upon
 6 the expiration of such period. Where activities under any
 7 license might serve to maintain or to foster the growth of
 8 monopoly, restraint of trade, unlawful competition, or other
 9 trade position inimical to the entry of new, freely competitive
 10 enterprises in the field, the Commission is authorized and
 11 directed to refuse to issue such license or to establish such
 12 conditions to prevent these results as the Commission, in
 13 consultation with the Attorney General, may determine.
 14 The Commission shall report promptly to the Attorney Gen-
 15 eral any information it may have with respect to any utili-
 16 zation of fissionable material or atomic energy which appears
 17 to have these results. No license may be given to any
 18 person for activities which are not under or within the
 19 jurisdiction of the United States ~~or States~~, to any foreign gov-
 20 ernment, *or to persons within the jurisdiction of the United*
 21 *States where the issuance thereof would be inimical to the*
 22 *common defense and security.*

23 (d) BYPRODUCT POWER.—If energy which may be
 24 utilized is produced in the production of fissionable material,

1 such energy may be used by the Commission, transferred
2 to other Government agencies, or sold to public or private
3 utilities under contracts providing for reasonable resale prices.

4 INTERNATIONAL ARRANGEMENTS

5 SEC. 8. (a) DEFINITION.—As used in this Act, the
6 term “international arrangement” shall mean any treaty
7 approved by the Senate or international agreement *hereafter*
8 approved by the Congress, during the time such treaty or
9 agreement is in full force and effect.

10 (b) EFFECT OF INTERNATIONAL ARRANGEMENTS.—
11 Any provision of this Act or any action of the Commission
12 to the extent that it conflicts with the provisions of any
13 international arrangement made after the date of enactment
14 of this Act shall be deemed to be of no further force or effect.

15 (c) POLICIES CONTAINED IN INTERNATIONAL AR-
16 RANGEMENTS.—In the performance of its functions under
17 this Act, the Commission shall give maximum effect to the
18 policies contained in any such international arrangement.

19 PROPERTY OF THE COMMISSION

20 SEC. 9. (a) The President shall direct the transfer to
21 the Commission of all interests owned by the United States
22 or any Government agency in the following property:

23 (1) All fissionable material; all atomic weapons and
24 parts thereof; all facilities, equipment, and materials for
25 the processing, production, or utilization of fissionable ma-

1 terial or atomic energy; all processes and technical infor-
2 mation of any kind, and the source thereof (including data,
3 drawings, specifications, patents, patent applications, and
4 other sources) relating to the processing, production, or utili-
5 zation of fissionable material or atomic energy; and all con-
6 tracts, agreements, leases, patents, applications for patents,
7 inventions and discoveries (whether patented or unpatented),
8 and other rights of any kind concerning any such items;

9 (2) All facilities, equipment, and materials, devoted
10 primarily to atomic energy research and development; and

11 (3) Such other property owned by or in the custody
12 or control of the Manhattan Engineer District or other Gov-
13 ernment agencies as the President may determine.

14 (b) In order to render financial assistance to those
15 States and localities in which the activities of the Com-
16 mission are carried on and in which the Commission has ac-
17 quired property previously subject to State and local tax-
18 ation, the Commission is authorized to make payments to
19 State and local governments in lieu of property taxes. Such
20 payments may be in the amounts, at the times, and upon the
21 terms the Commission deems appropriate, but the Commis-
22 sion shall be guided by the policy of not making payments
23 in excess of the taxes which would have been payable for
24 such property in the condition in which it was acquired,

1 except in cases where special burdens have been cast upon
2 the State or local government by activities of the Commission,
3 the Manhattan Engineer District or their agents. In any
4 such case, any benefit accruing to the State or local gov-
5 ernment by reason of such activities shall be considered in
6 determining the amount of the payment. The Commission,
7 and the property, activities, and income of the Commission,
8 are hereby expressly exempted from taxation in any manner
9 or form by any State, county, municipality, or any sub-
10 division thereof.

11 CONTROL OF INFORMATION

12 SEC. 10. (a) POLICY.—It shall be the policy of the
13 Commission to control the dissemination of restricted data in
14 such a manner as to assure the common defense and security.
15 Consistent with such policy, the Commission shall be guided
16 by the following principles:

17 (1) That information with respect to the use of
18 atomic energy for industrial purposes should be shared
19 with other nations on a reciprocal basis as soon as the
20 Congress declares by joint resolution that effective and
21 enforceable international safeguards against the use of
22 such energy for destructive purposes have been estab-
23 lished; and

24 (2) That the dissemination of scientific and tech-
25 nical information relating to atomic energy should be

1 permitted and encouraged so as to provide that free
2 interchange of ideas and criticisms which is essential to
3 scientific progress.

4 (b) DISSEMINATION.—The Commission is authorized
5 and directed to establish such information services, publica-
6 tions, libraries, and other registers of available information
7 as it may deem necessary or desirable to provide for the dis-
8 semination of information in accordance with subsection (a).

9 (c) RESTRICTIONS.—

10 (1) The term “restricted data” as used in this section
11 means all data concerning the manufacture or utilization of
12 atomic weapons, the production of fissionable material, or the
13 use of fissionable material in the production of power, but
14 shall not include any data which the Commission from time
15 to time determines may be published without adversely affect-
16 ing the common defense and security.

17 (2) Whoever, lawfully or unlawfully, having posses-
18 sion of, access to, control over, or being entrusted with, any
19 document, writing, sketch, photograph, plan, model, instru-
20 ment, appliance, note or information involving or incorporat-
21 ing restricted data—

22 (A) communicates, transmits, or discloses the same
23 to any individual or person, or attempts or conspires to
24 do any of the foregoing, with intent to injure the
25 United States or with intent to secure an advantage

1 to any foreign nation, upon conviction thereof, shall be
2 punished by a fine of not more than \$20,000 or im-
3 prisonment for not more than twenty years, or both;

4 (B) communicates, transmits, or discloses the same
5 to any individual or person, or attempts or conspires to
6 do any of the foregoing, with reason to believe such data
7 will be utilized to injure the United States or to secure an
8 advantage to any foreign nation, shall, upon conviction,
9 be punished by a fine of not more than \$10,000 or
10 imprisonment for not more than ten years, or both.

11 (3) Whoever, with intent to injure the United States
12 or with intent to secure an advantage to any foreign nation,
13 acquires or attempts or conspires to acquire any document,
14 writing, sketch, photograph, plan, model, instrument, ap-
15 pliance, note or information involving or incorporating
16 restricted data shall, upon conviction thereof, be punished
17 by a fine of not more than \$20,000 or imprisonment for not
18 more than twenty years, or both.

19 (4) Whoever, with intent to injure the United States or
20 with intent to secure an advantage to any foreign nation,
21 removes, conceals, tampers with, alters, mutilates, or destroys
22 any document, writing, sketch, photograph, plan, model, in-
23 strument, appliance, or note involving or incorporating re-
24 stricted data and used by any individual or person in

1 connection with the production of fissionable material, or
 2 research or development relating to atomic energy, conducted
 3 by the United States, or financed in whole or in part by
 4 Federal funds, or conducted with the aid of fissionable
 5 material, shall be punished by a fine of not more than \$20,000
 6 or imprisonment for not more than twenty years or both.

7 ~~(5)~~ No person shall be prosecuted for any violation
 8 under this section unless and until the Attorney General of
 9 the United States has advised and consulted with the Com-
 10 mission with respect to such prosecution.

11 ~~(6)~~ (5) This section shall not exclude the applicable pro-
 12 visions of any other laws, except that no Government agency
 13 shall take any action under such other laws inconsistent with
 14 the provisions of this section.

15 (d) INSPECTIONS, RECORDS, AND REPORTS.—The
 16 Commission is—

17 (1) authorized by regulation or order to require
 18 such reports and the keeping of such records with
 19 respect to, and to provide for such inspections of, activ-
 20 ities and studies of types specified in section 3 and of
 21 activities under licenses issued pursuant to section 7 as
 22 may be necessary to effectuate the purposes of this Act;

23 (2) authorized and directed by regulation or order
 24 to require regular reports and records with respect to,

1 and to provide for frequent inspections of, the production
2 of fissionable material in the conduct of research and
3 development activities.

4 PATENTS AND INVENTIONS

5 SEC. 11. (a) PRODUCTION AND MILITARY UTILIZA-
6 TION.

7 (1) No patent shall hereafter be granted for any inven-
8 tion or discovery which is useful solely in the production of
9 fissionable material or in the utilization of fissionable material
10 or atomic energy for a military weapon. Any patent granted
11 for any such invention or discovery is hereby revoked, and
12 just compensation shall be made therefor.

13 (2) No patent hereafter granted shall confer any rights
14 with respect to any invention or discovery to the extent that
15 such invention or discovery is used in the production of fis-
16 sionable material or in the utilization of fissionable material
17 or atomic energy for a military weapon. Any rights con-
18 ferred by any patent heretofore granted for any invention or
19 discovery are hereby revoked to the extent that such inven-
20 tion or discovery is so used, and just compensation shall be
21 made therefor.

22 (3) Any person who has made or hereafter makes any
23 invention or discovery useful in the production of fissionable
24 material or in the utilization of fissionable material or atomic
25 energy for a military weapon shall file with the Commission

1 a report containing a complete description thereof, unless such
2 invention or discovery is described in an application for a
3 patent filed in the Patent Office by such person within the
4 time required for the filing of such report. The report cover-
5 ing any such invention or discovery shall be filed on or before
6 whichever of the following is the latest: (A) The sixtieth day
7 after the date of enactment of this Act; (B) the sixtieth day
8 after the completion of such invention or discovery; or (C)
9 the sixtieth day after such person first discovers or first has
10 reason to believe that such invention or discovery is useful
11 in such production or utilization.

12 (b) USE OF INVENTIONS FOR RESEARCH.—No patent
13 hereafter granted shall confer any rights with respect to
14 any invention or discovery to the extent that such invention
15 or discovery is used in the conduct of research or develop-
16 ment activities in the fields specified in section 3. Any
17 rights conferred by any patent heretofore granted for
18 any invention or discovery are hereby revoked to the extent
19 that such invention or discovery is so used, and just compen-
20 sation shall be made therefor.

21 (c) NONMILITARY UTILIZATION.—

22 (1) It shall be the duty of the Commission to declare
23 any patent to be affected with the public interest if (A) the
24 invention or discovery covered by the patent utilizes or is
25 essential in the utilization of fissionable material or atomic

1 energy; and (B) the licensing of such invention or discovery
2 under this subsection is necessary to effectuate the policies
3 and purposes of this Act.

4 (2) Whenever any patent has been declared, pursuant
5 to paragraph (1), to be affected with the public interest—

6 (A) The Commission is hereby licensed to use the
7 invention or discovery covered by such patent in per-
8 forming any of its powers under this Act; and

9 (B) Any person to whom a license has been issued
10 under section 7 is hereby licensed to use the invention
11 or discovery covered by such patent to the extent such
12 invention or discovery is used by him in carrying on
13 the activities authorized by his license under section 7.
14 The owner of the patent shall be entitled to a reasonable
15 royalty fee for any use of an invention or discovery licensed
16 by this subsection. Such royalty fee may be agreed upon
17 by such owner and the licensee, or in the absence of such
18 agreement shall be determined by the Commission.

19 (3) No court shall have jurisdiction or power to stay,
20 restrain, or otherwise enjoin the use of any invention or
21 discovery by a licensee, to the extent that such use is licensed
22 by paragraph (2) above, on the ground of infringement of
23 any patent. If in any action for infringement against
24 such licensee the court shall determine that the defendant
25 is exercising such license, the measure of damages shall be

1 the royalty fee determined pursuant to this section, together
2 with such costs, interest, and reasonable attorney's fees as
3 may be fixed by the court. If no royalty fee has been
4 determined, the court shall stay the proceeding until the
5 royalty fee is determined pursuant to this section. If any
6 such licensee shall fail to pay such royalty fee, the patentee
7 may bring an action in any court of competent jurisdiction
8 for such royalty fee, together with such costs, interest, and
9 reasonable attorney's fees as may be fixed by the court.

10 (d) ACQUISITION OF PATENTS.—The Commission is
11 authorized to purchase, or to take, requisition, or condemn,
12 and make just compensation for, (1) any invention or dis-
13 covery which is useful in the production of fissionable
14 material or in the utilization of fissionable material or atomic
15 energy for a military weapon, or which utilizes or is essential
16 in the utilization of fissionable material or atomic energy,
17 or (2) any patent or patent application covering any such
18 invention or discovery. The Commissioner of Patents shall
19 notify the Commission of all applications for patents hereto-
20 fore or hereafter filed which in his opinion disclose such in-
21 ventions or discoveries and shall provide the Commission
22 access to all such applications.

23 (e) COMPENSATION AWARDS, AND ROYALTIES.—

24 (1) PATENT COMPENSATION BOARD.—The Commis-
25 sion shall designate a Patent Compensation Board, consisting

1 of two or more employees of the Commission, to consider
2 applications under this subsection.

3 (2) ELIGIBILITY.—

4 (A) Any owner of a patent licensed under sub-
5 section (c) (2) or any licensee thereunder may make
6 application to the Commission for the determination of
7 a reasonable royalty fee in accordance with such pro-
8 cedures as it by regulation may establish.

9 (B) Any person seeking to obtain the just com-
10 pensation provided in subsections (a), (b), or (d)
11 shall make application therefor to the Commission in
12 accordance with such procedures as it may by regulation
13 establish.

14 (C) Any person making any invention or discovery
15 useful in the production of fissionable material or in the
16 utilization of fissionable material or atomic energy for a
17 military weapon who is not entitled to compensation
18 therefor under subsection (a) and who has complied
19 with subsection (a) (3) above may make application
20 to the Commission for, and the Commission may grant,
21 an award.

22 (D) Any person making application under this sub-
23 section shall have the right to be represented by counsel.

24 (3) STANDARDS.—

25 (A) In determining such reasonable royalty fee,

1 the Commission shall take into consideration any defense,
2 general or special, that might be pleaded by a defendant
3 in an action for infringement, the extent to which, if any,
4 such patent was developed through federally financed
5 research, the degree of utility, novelty, and importance
6 of the invention or discovery, and may consider the cost
7 to the owner of the patent of developing such invention
8 or discovery or acquiring such patent.

9 (B) In determining what constitutes just compensa-
10 tion under subsection (a), (b), or (d) above, the Com-
11 mission shall take into account the considerations set
12 forth in paragraph (A) above, and the actual use of
13 such invention or discovery, and may determine that
14 such compensation be paid in periodic payments or in a
15 lump sum.

16 (C) In determining the amount of any award under
17 paragraph (2) (C) of this subsection, the Commission
18 shall take into account the considerations set forth in
19 paragraph (A) above, and the actual use of such inven-
20 tion or discovery. Awards so made may be paid by the
21 Commission in periodic payments or in a lump sum.

22 (4) JUDICIAL REVIEW.—Any person aggrieved by any
23 determination of the Commission of an award or of a reason-
24 able royalty fee may obtain a review of such determination in
25 the Court of Appeals for the District of Columbia by filing in

1 such court, within thirty days after notice of such determina-
2 tion, a written petition praying that such determination be set
3 aside. A copy of such petition shall be forthwith served upon
4 the Commission and thereupon the Commission shall file with
5 the court a certified transcript of the entire record in the
6 proceeding, including the findings and conclusions upon
7 which the determination was based. Upon the filing of
8 such transcript the court shall have exclusive jurisdiction
9 upon the record certified to it to affirm the determination in
10 its entirety or set it aside and remand it to the Commission
11 for further proceedings. The findings of the Commission
12 as to the facts, if supported by substantial evidence, shall
13 be conclusive. The court's judgment shall be final, subject,
14 however, to review by the Supreme Court of the United
15 States upon writ of certiorari on petition therefor under
16 section 240 of the Judicial Code (U. S. C., title 28, sec.
17 347), by the Commission or any party to the court pro-
18 ceeding.

19 GENERAL AUTHORITY

20 SEC. 12. (a) In the performance of its functions the
21 Commission is authorized to—

22 (1) establish advisory boards to advise with and
23 make recommendations to the Commission on legisla-
24 tion, policies, administration, research, and other matters;

25 (2) establish by regulation or order such stand-

ards and instructions to govern the possession and use of fissionable and byproduct materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this Act, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony Act of February 11, 1893 (U. S. C., title 49, sec. 46), shall apply with respect to any individual who specifically claims such privilege. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) appoint and fix the compensation of such offi-

1 cers and employees as may be necessary to carry out
2 the functions of the Commission. Such officers and
3 employees shall be appointed in accordance with the
4 civil-service laws and their compensation fixed in ac-
5 cordance with the Classification Act of 1923, as
6 amended, except that to the extent the Commission
7 deems such action necessary to the discharge of its
8 responsibilities, personnel may be employed and their
9 compensation fixed without regard to such laws. At-
10 torneys appointed under this paragraph may appear
11 for and represent the Commission in any case in any
12 court. The Commission shall make adequate provision
13 for administrative review of any determination to
14 dismiss any employee;

15 (5) acquire such materials, property, equipment,
16 and facilities, establish or construct such buildings and
17 facilities, and modify such buildings and facilities from
18 time to time as it may deem necessary, and construct,
19 acquire, provide, or arrange for such facilities and serv-
20 ices (at project sites where such facilities and services
21 are not available) for the housing, health, safety, wel-
22 fare, and recreation of personnel employed by the Com-
23 mission as it may deem necessary;

24 (6) with the consent of the agency concerned,
25 utilize or employ the services or personnel of any Gov-

ernment agency or any State or local government, or
voluntary or uncompensated personnel, to perform such
functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this Act;

(8) contract for the expenditure of funds for the purposes specified in section 10 (b) without regard to the provisions of section 87 of the Act of January 12, 1895 (28 Stat. 622), and section 11 of the Act of March 1, 1919 (40 Stat. 1270; U. S. C., title 44, sec. 111); and

(9) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) SECURITY.—The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

(c) ADVISORY COMMITTEES.—The members of the

1 General Advisory Committee established pursuant to section
2 2 (b) and the members of advisory boards established
3 pursuant to subsection (a) (1) of this section may serve
4 as such without regard to the provisions of sections 109
5 and 113 of the Criminal Code (18 U. S. C., secs. 198 and
6 203) or section 19 (e) of the Contract Settlement Act of
7 1944, except insofar as such sections may prohibit any such
8 member from receiving compensation in respect of any par-
9 ticular matter which directly involves the Commission or
10 in which the Commission is directly interested.

11 COMPENSATION FOR PRIVATE PROPERTY

12 ACQUIRED

13 SEC. 13. (a) The United States shall make just com-
14 pensation for any property or interests therein taken or
15 requisitioned pursuant to sections 5 and 11. The Commis-
16 sion shall determine such compensation. If the compensa-
17 tion so determined is unsatisfactory to the person entitled
18 thereto, such person shall be paid 50 per centum of the
19 amount so determined, and shall be entitled to sue the United
20 States in the Court of Claims or in any district court of the
21 United States in the manner provided by sections 24 (20)
22 and 145 of the Judicial Code to recover such further sum
23 as added to said 50 per centum will make up such amount
24 as will be just compensation.

1 (b) In the exercise of the rights of eminent domain and
2 condemnation, proceedings may be instituted under the Act
3 of August 1, 1888 (U. S. C., title 40, sec. 257), or any
4 other applicable Federal statute. Upon or after the filing of
5 the condemnation petition, immediate possession may be
6 taken and the property may be occupied, used, and improved
7 for the purposes of this Act, notwithstanding any other law.
8 Real property acquired by purchase, donation, or other means
9 of transfer may also be occupied, used, and improved for the
10 purposes of this Act, prior to approval of title by the Attorney
11 General.

12 *JUDICIAL REVIEW AND ADMINISTRATIVE*
13 *PROCEDURE*

14 *SEC. 14. (a) Notwithstanding the provisions of section*
15 *12 of the Administrative Procedure Act (Public Law 404,*
16 *Seventy-ninth Congress, approved June 11, 1946) which*
17 *provide when such Act shall take effect, section 10 of such*
18 *Act (relating to judicial review) shall be applicable, upon*
19 *the enactment of this Act, to any agency action under the*
20 *authority of this Act or by any agency created by or under*
21 *the provisions of this Act.*

22 *(b) Except as provided in subsection (a), no provision*
23 *of this Act shall be held to supersede or modify the provisions*
24 *of the Administrative Procedure Act.*

1 (c) *As used in this section the terms "agency action"*
 2 *and "agency" shall have the same meaning as is assigned to*
 3 *such terms in the Administrative Procedure Act.*

4 JOINT COMMITTEE ON ATOMIC ENERGY

5 SEC. ~~14~~ 15. (a) There is hereby established a Joint
 6 Committee on Atomic Energy to be composed of ~~nine~~ *eleven*
 7 Members of the Senate to be appointed by the President of the
 8 Senate, and ~~nine~~ *eleven* Members of the House of Representa-
 9 tives to be appointed by the Speaker of the House of Repre-
 10 sentatives. In each instance not more than ~~five~~ *six* members
 11 shall be members of the same political party.

12 (b) The joint committee shall make continuing studies
 13 of the activities of the Atomic Energy Commission and of
 14 problems relating to the development, use, and control of
 15 atomic energy. The Commission shall keep the joint com-
 16 mittee fully and currently informed with respect to the
 17 Commission's activities. All bills, resolutions, and other
 18 matters in the Senate or the House of Representatives re-
 19 lating primarily to the Commission or to the development, use,
 20 or control of atomic energy shall be referred to the joint com-
 21 mittee. The members of the joint committee who are Mem-
 22 bers of the Senate shall from time to time report to the Senate,
 23 and the members of the joint committee who are Members
 24 of the House of Representatives shall from time to time
 25 report to the House, by bill or otherwise, their recommen-

1 dations with respect to matters within the jurisdiction of their
2 respective Houses which are (1) referred to the joint com-
3 mittee or (2) otherwise within the jurisdiction of the joint
4 committee.

5 (c) Vacancies in the membership of the joint commit-
6 tee shall not affect the power of the remaining members to
7 execute the functions of the joint committee, and shall be
8 filled in the same manner as in the case of the original selec-
9 tion. The joint committee shall select a chairman and a vice
10 chairman from among its members.

11 (d) The joint committee, or any duly authorized sub-
12 committee thereof, is authorized to hold such hearings, to
13 sit and act at such places and times, to require, by subpoena
14 or otherwise, the attendance of such witnesses and the
15 production of such books, papers, and documents, to admin-
16 ister such oaths, to take such testimony, to procure such
17 printing and binding, and to make such expenditures as it
18 deems advisable. The cost of stenographic services to report
19 such hearings shall not be in excess of 25 cents per hundred
20 words. The provisions of sections 102 to 104, inclusive, of
21 the Revised Statutes shall apply in case of any failure of any
22 witness to comply with a subpoena or to testify when sum-
23 moned under authority of this section.

24 (e) The joint committee is empowered to appoint and
25 fix the compensation of such experts, consultants, technicians,

1 and clerical and stenographic assistants as it deems necessary
2 and advisable, but the compensation so fixed shall not exceed
3 the compensation prescribed under the Classification Act of
4 1923, as amended, for comparable duties. The committee
5 is authorized to utilize the services, information, facilities, and
6 personnel of the departments and establishments of the
7 Government.

8 ENFORCEMENT

9 SEC. 16. (a) Whoever willfully violates, attempts to
10 violate, or conspires to violate, any provision of sections
11 4 (b), 4 (e), 5 (a) (3), or 6 (b) shall, upon conviction
12 thereof, be punished by a fine of not more than \$10,000 or by
13 imprisonment for not more than five years, or both, except
14 that whoever commits such an offense with intent to injure
15 the United States or with intent to secure an advantage to
16 any foreign nation shall, upon conviction thereof, be pun-
17 ished by a fine of not more than \$20,000 or by imprisonment
18 for not more than twenty years, or both.

19 (b) Whoever willfully violates, attempts to violate, or
20 conspires to violate, any provision of this Act other than
21 those specified in subsection (a) and other than section 10
22 (c), or of any regulation or order prescribed or issued under
23 sections 5 (b) (4), 10 (d), or 12 (a) (2), shall, upon
24 conviction thereof, be punished by a fine of not more than
25 \$5,000 or by imprisonment for not more than two years,

1 or both, except that whoever commits such an offense with
2 intent to injure the United States or with intent to secure
3 an advantage to any foreign nation shall, upon conviction
4 thereof, be punished by a fine of not more than \$20,000 or
5 by imprisonment for not more than twenty years, or both.

6 (c) Whenever in the judgment of the Commission any
7 person has engaged or is about to engage in any acts or
8 practices which constitute or will constitute a violation of
9 any provision of this Act, or any regulation or order issued
10 thereunder, it may make application to the appropriate court
11 for an order enjoining such acts or practices, or for an order
12 enforcing compliance with such provision, and upon a show-
13 ing by the Commission that such person has engaged or is
14 about to engage in any such acts or practices a permanent
15 or temporary injunction, restraining order, or other order
16 ~~shall~~ *may* be granted ~~without bond~~.

17 (d) In case of failure or refusal to obey a subpoena
18 served upon any person pursuant to section 12 (a) (3),
19 the district court for any district in which such person is
20 found or resides or transacts business, upon application by
21 the Commission, shall have jurisdiction to issue an order
22 requiring such person to appear and give testimony or to
23 appear and produce documents, or both, in accordance with
24 the subpoena; and any failure to obey such order of the court
25 may be punished by such court as a contempt thereof.

1 (e) All violations of this Act shall be investigated by
2 the Federal Bureau of Investigation of the Department of
3 Justice.

REPORTS

5 SEC. 46 17. The Commission shall submit to the Con-
6 gress, in January and July of each year, a report concerning
7 the activities of the Commission. The Commission shall
8 include in such report, and shall at such other times as it
9 deems desirable submit to the Congress, such recommenda-
10 tions for additional legislation as the Commission deems
11 necessary or desirable.

DEFINITIONS

SEC. ~~17~~ 18. As used in this Act—

(a) The term “atomic energy” shall be construed to mean all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation.

(b) The term "Government agency" means any executive department, commission, independent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other establishment, in the executive branch of the Government.

(c) The term “person” means any individual, corporation, partnership, firm, association, trust, estate, public or

1 private institution, group, the United States or any agency
2 thereof, any government other than the United States, any
3 political subdivision of any such government, and any legal
4 successor, representative, agent, or agency of the foregoing,
5 or other entity, but shall not include the Commission or offi-
6 cers or employees of the Commission in the exercise of duly
7 authorized functions.

8 (d) The term "United States", when used in a geo-
9 graphical sense, includes all Territories and possessions of
10 the United States *and the Canal Zone*.

11 (e) The term "research and development" means theo-
12 retical analysis, exploration, and experimentation, and the
13 extension of investigative findings and theories of a scientific
14 or technical nature into practical application for experimental
15 and demonstration purposes, including the experimental pro-
16 duction and testing of models, devices, equipment, materials,
17 and processes.

18 (f) The term "equipment or device utilizing fissionable
19 material or atomic energy" shall be construed to mean any
20 equipment or device capable of making use of fissionable
21 material or peculiarly adapted for making use of atomic
22 energy and any important component part especially de-
23 signed for such equipment or devices, as determined by the
24 Commission.

25 (g) The term "facilities for the production of fission-

1 able material" shall be construed to mean any equipment or
2 device *peculiarly adapted for and* capable of such production
3 and any important component part especially designed for
4 such equipment or devices, as determined by the Commission.

5 APPROPRIATIONS

6 SEC. ~~18~~ 19. (a) There are hereby authorized to be ap-
7 propriated such sums as may be necessary and appropriate to
8 carry out the provisions and purposes of this Act. The Acts
9 appropriating such sums may appropriate specified portions
10 thereof to be accounted for upon the certification of the
11 Commission only. Funds appropriated to the Commission
12 shall, if obligated by contract during the fiscal year for which
13 appropriated, remain available for expenditure for four years
14 following the expiration of the fiscal year for which appro-
15 priated. After such four-year period, the unexpended bal-
16 ances of appropriations shall be carried to the surplus fund
17 and covered into the Treasury.

18 (b) Such part as the President may determine of the
19 unexpended balances of appropriations, allocations, or other
20 funds available for expenditure in connection with the Man-
21 hattan Engineer District are hereby transferred to the Com-
22 mission and shall be available for expenditure for the purpose
23 of carrying out the provisions of this Act.

SEPARABILITY OF PROVISIONS

SEC. ~~19~~ 20. If any provision of this Act, or the application of such provision to any person or circumstances, is held invalid, the remainder of this Act or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SHORT TITLE

SEC. ~~20~~ 21. This Act may be cited as the "Atomic Energy Act of 1946".

Passed the Senate June 1 (legislative day, March 5), 1946.

Attest:

LESLIE L. BIFFLE,
Secretary.

Union Calendar No. 757

70TH CONGRESS
2^D Session

S. 1717

[Report No. 2478]

AN ACT

For the development and control of atomic
energy.

JUNE 5, 1946

Referred to the Committee on Military Affairs

JULY 10, 1946

Reported with amendments, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

CONSIDERATION OF S. 1717

JULY 13, 1946.—Referred to the House Calendar and ordered to be printed

Mr. SABATH, from the Committee on Rules, submitted the following

REPORT

[To accompany H. Res. 708]

The Committee on Rules, having had under consideration House Resolution 708, report the same to the House with the recommendation that the resolution do pass.



House Calendar No. 453

79TH CONGRESS
2D SESSION

H. RES. 708

[Report No. 2518]

IN THE HOUSE OF REPRESENTATIVES

JULY 13, 1946

Mr. SABATH, from the Committee on Rules, reported the following resolution; which was referred to the House Calendar and ordered to be printed

RESOLUTION

1 *Resolved*, That upon the adoption of this resolution it
2 shall be in order to move that the House resolve itself into
3 the Committee of the Whole House on the State of the
4 Union for the consideration of the Act (S. 1717) for the
5 development and control of atomic energy. That after
6 general debate, which shall be confined to the Act and
7 shall continue not to exceed four hours to be equally divided
8 and controlled by the chairman and the ranking minority
9 member of the Committee on Military Affairs, the Act
10 shall be read for amendment under the five-minute rule.
11 At the conclusion of the reading of the Act for amend-
12 ment, the Committee shall rise and report the same to the
13 House with such amendments as may have been adopted

1 and the previous question shall be considered as ordered
2 on the Act and amendments thereto to final passage with-
3 out intervening motion except one motion to recommit.

House Calendar No. 453

79TH CONGRESS
2d Session

H. RES. 708

[Report No. 2518]

RESOLUTION

Providing for the consideration of S. 1717, an
Act for the development and control of
atomic energy.

By Mr. SABATH

JULY 13, 1946

Referred to the House Calendar and ordered to be
printed

DIRECTOR OF
CONGRESSIONAL PROCEEDINGS
OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF BUDGET AND FINANCE
Legislative Reports and Service Section
(For Department staff only)

Issued July 17, 1946
For actions of July 16, 1946
79th-2nd, No. 139

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HIGHLIGHTS: House sent price-control measure to conference. House further insisted on provision in Labor-Federal Security appropriation bill prohibiting NLRB actions regarding packing-canning employees. House completed action on Government corporations appropriation bill. House passed S. 1236, to amend Mineral Leasing Act. Senate passed bill to continue Sugar Act; agreed to Sen. George's request that continuation be for one year instead of 3. Senate passed 3rd deficiency appropriation bill; agreed to committee amendments regarding USDA; agreed to Cordon amendment to authorize CCC to buy and process surplus potatoes for foreign relief. Senate committee reported O'Mahoney wool bill.

HOUSE

1. **PRICE CONTROL.** Reps. Spence, Brown of Ga., Patman, Barry, Wolcott, Crawford, and Gamble were appointed conferees on H. J. Res. 371, to extend and amend the Price Control and Stabilization Acts (p. 9260). The vote on ordering the previous question on a resolution to send the measure to conference was 211-64 (pp. 9250-60, 9286-91). House conferees appointed July 12.
2. **LABOR-FEDERAL SECURITY APPROPRIATION BILL.** Received a further conference report on this bill, H. R. 6739, stating that the conferees failed to agree regarding the Elliott amendment to prohibit NLRB action regarding packing and canning employees. Insisted on the amendment after rejecting, 136-213, a motion by Rep. Keefe, Wis., to concur in the Senate amendment to strike out the Elliott amendment. (pp. 9249-50, 9270-6.)
3. **GOVERNMENT CORPORATIONS APPROPRIATION BILL.** Agreed to a motion by Rep. Whitten, Miss., to concur in a Senate amendment, as amended, which does not affect this Department (pp. 9248-9). This bill will now be sent to the President.
4. **MINERALS.** Passed as reported S. 1236, to amend the Mineral Leasing Act so as to promote development of oil and gas on the public domain (pp. 9224-8).
5. **FORESTRY.** Passed with amendments H. R. 7004, to revise the boundaries of Wind Cave National Park, S. Dak., which involves exchange of land in the Harney National Forest (pp. 9294-5).
6. **SYNTHETIC-RUBBER PLANTS.** Rep. Manasco, Ala., asked for consideration of S. J. Res. 174, prohibiting War Assets Administration from disposing of certain synthetic-rubber plants and facilities until 6 months after a national rubber program is submitted to Congress, but withdrew his request after discussion

7. ATOMIC ENERGY. Agreed, 162-35, to a resolution providing for consideration of S. 1717, the atomic-energy bill (pp. 9260-9).
8. FISHERIES. Passed as reported H. R. 3230, to provide for investigation and conservation of the fishery resources and development of the fishing industry in and near Hawaii (pp. 9221-2).
9. VETERANS. Rep. Kearney, N. Y., spoke in favor of H. R. 6746, the "Veterans Employment and National Economic Development Corporation Act of 1946" (pp. 9291-4).
10. SOCIAL SECURITY. As reported July 15, H. R. 7037 extends the present rates for the Federal Insurance Contributions Act until Dec. 31, 1947. Otherwise it is the same as H. R. 6911 (see Digest 130).

SENATE

11. THIRD DEFICIENCY APPROPRIATION BILL. Passed with amendments this bill, H.R. 6885 (pp. 9193-214). Agreed to committee amendments to items for this Department. Rejected Sen. Barkley's (K.) amendment to restrict lend-lease shipments after Dec. 31, 1946, to those other than agricultural commodities (p. 9205-7). Agreed to Sen. Cordon's (Oreg.) amendment to authorize CCC to purchase, process, etc., surplus potatoes of the 1946 crop for foreign relief purposes (pp. 9208-14).
Sen. Ball (Minn.) discussed with other members the nutritional value of potatoes as compared to grains and the feasibility of shipment of raw potatoes abroad (pp. 9208-14).
Sens. McKellar, Hayden, Russell, Overton, Thomas (Ola.), Brooks, Bridges, and Gurney were appointed conferees (p. 9214). House conferees not yet appointed.
12. SUGAR-ACT CONTINUATION. Passed with amendments H.R. 6689, to continue the act for one year (pp. 9215-6). Rejected committee amendments to continue the act for three years.
13. WOOL MARKETING. Reported with amendments S. 2033, to provide for support for wool, to amend the Agricultural Marketing Agreement Act of 1937 by including wool as a commodity to which orders under such Act are applicable, and to authorize the Secretary to fix wool standards (S. Rept. 1716) (p. 9134).
14. SURPLUS PROPERTY. Received from REC a certificate of dissolution of the War Assets Corporation (p. 9183).
15. RENT CONTROL. Sen. White, Maine, inserted a Lewiston (Maine) resolution favoring rent-control legislation (p. 9134).
16. REGIONAL AUTHORITIES. Sen. McKellar, Tenn., inserted and discussed with other members Drew Pearson's Washington Post article, "McKellar Turns TVA Sugar-Dad" (pp. 9215-6).

BILLS INTRODUCED

17. SUBSIDIES. S. 2445, by Sen. Downey, Calif., "to amend Public Law 86, Seventy-ninth Congress." To Banking and Currency Committee. (p. 9134.)
18. PUBLIC LANDS; VETERANS. H.R. 7054, by Rep. Jackson, Wash., to extend to veterans of World War II preference with respect to the sale of lands disposed of

of price control in the United States for another year. "GI" Fisher says he has had an opportunity to witness inflation in Japan where prices, according to his letter, have risen 1,200 percent since 1939. Following is the letter from the American advocate of real price control now stationed in Yokohama, Japan:

YOKOHAMA, July 5, 1946.

DEAR SIR: I hope that by the time this letter reaches you something will have been done to restore the power of the OPA. I am alarmed at the rapid increase in prices and fear that a run-away inflation may develop which will end in a depression. The danger was never so great. Here in Japan prices have risen 1,200 percent since 1939. Many people have been forced to sell personal belongings and household furnishings in order to purchase food and clothing. Having witnessed the devastating effect of inflation in Japan I cannot remain complacent about the expiration of the OPA.

Please do your utmost to enact effective OPA legislation for another year.

T4g GERALD E. FISHER,

Headquarters, Eighth Army, AG Section, APO 343, Care of Postmaster, San Francisco.

Mr. SABATH. Mr. Speaker, I yield 4 minutes to the gentleman from Mississippi [Mr. WHITTINGTON].

Mr. WHITTINGTON. Mr. Speaker, the criticism of the rule under consideration by the gentleman from Ohio [Mr. BROWN] with all deference, is without foundation. This rule provides that we do by rule what is ordinarily done by unanimous consent. I quote from the pending rule:

That the conference requested by the Senate on the disagreeing votes of the two Houses on the said bill be, and is hereby, agreed to by the House, and that the Speaker shall immediately appoint conferees, without intervening motion.

I repeat, to emphasize, there is nothing unusual in the language of the pending rule. It simply provides that the House shall do by this rule exactly what the House ordinarily does on legislation by unanimous consent, to wit, agree to the conference asked by the Senate and immediately appoint conferees.

If the gentleman from Ohio opposes the rule, what is his substitute or solution?

The pending bill was largely written on the floor of the Senate. There is no report from the Senate Committee on Banking and Currency. Personally, I favor a number of the provisions of the Senate bill. I oppose others. When the House conferees go to conference they will have the benefit of the bill that was passed by the House some time ago after comprehensive hearings by the House Committee on Banking and Currency, and after adequate debate on the floor of the House. The Senate amended the House bill, and after the House agreed to the amendments, the bill was vetoed by the President. The conferees of both the Senate and the House will have the benefit of the provisions of that bill.

Price control was gradually adopted. We first provided for the control of prices and after a lapse of about 9 months we provided for the control of wages.

The point is that controls were gradually adopted. In my judgment, if we are constructive, those controls will be gradually eliminated. Our neighbor to

the north, Canada, still has controls. Great Britain, depending upon foreign trade, importing more than any other nation, both the largest customer and the greatest competitor of the United States in foreign trade, still maintains controls. Notwithstanding the many mistakes of price control and our experience under the recent administration of Chester Bowles, price control was by and large effective. Consumers were protected. We must profit by the experiences following the First World War. Prices increased. As a result of the inflation following the First World War, in my judgment, we lost many of our foreign markets. We have never regained them. If, as a result of controls, we are unable to sell our products to Canada and Great Britain, the United States will be the loser. Controls were gradually adopted. Sudden elimination would be dangerous.

I extend to say I believe that a mistake was made in undertaking to increase wages without providing for increases in products. It was utterly unsound to require dealers to absorb the increased costs. We must profit by the mistakes. We must not repeat them. There must be no unbridled inflation. Controls should be eliminated, over both commodities and manufactures, when the supply equals the domestic demand. There must be production. We muffed the ball following the war. We had the greatest productive machinery in history; there was ample money; there was sufficient skilled labor; the civilian demands were the greatest in history. We undertook to increase wages without increasing prices.

The continuation of OPA and its gradual elimination must of necessity mean increased prices, but there must be no runaway prices. The House conferees are familiar with the views of the House. The House has expressed itself with respect to decontrols; with respect to reasonable profits, and with respect to the gradual elimination of controls, and the early discontinuance of food subsidies.

We have concluded the British loan. We expect to sell our commodities and our manufactures. We are making loans through the Export-Import Bank to France and other countries. If there is unprecedented increase in the prices of either commodities or manufactures, the loans that we have authorized will be curtailed and will not be productive of international commerce or of peace. We must prevent runaway inflation. We not only have the experience of the inflation following the First World War with the disastrous results not only to farming and to business, but we have the actual experience of the past 20 days to profit by. Unless some controls, including rent control, are retained, inflation will result.

The rule should be adopted. The resolution as passed by the House and the bill as passed by the Senate should go to conference. The House conferees should keep in mind the views and the votes of the House in the conference.

Mr. SABATH. Mr. Speaker, I yield 4 minutes to the gentleman from Virginia [Mr. SMITH].

Mr. SMITH of Virginia. Mr. Speaker, the sensible thing to do here this morn-

ing is to do the normal thing and send this bill to conference.

We have a very practical question before us. Some people might use the expression that for several weeks we have been shadow-boxing with the subject of price control. It is too dangerous a question to have any such atmosphere about it.

As a practical matter, there are three parties involved in this controversy: There is the Senate, and the House, and the President. When you talk about adopting the Senate amendments, we have been given to understand that if we do that it will go to the President and meet another veto. Now, that is not the practical, that is not the sensible thing for us to do; but if we appoint conferees from the Senate and the House—I do not know whether it is the parliamentary thing, but certainly it is the practical thing to open negotiations with the White House and find out just what sort of bill can be worked out that the President will sign. Let us be sensible about the thing. Just because we are in Congress is no reason why we should not do practical things, and that, to my mind, is the practical thing to do in this instance.

Figures have been floating around here this morning and I want to read some myself. I read from the report of the Bureau of Labor Statistics showing that 28 basic commodities that rose during the war by 13 percent up to the 1st day of July have between the 1st of July and the 14th of July gone to 24 percent; and on 12 foodstuffs, while they were 14 percent higher to the 1st of July, they are now 31 percent up; and on 6 raw materials, while they were 11.9 percent up on the 1st of July, they are 19 percent up now. These are figures from the Bureau of Labor Statistics.

I expressed myself as fearful of what might happen if price control were taken off, at the time we had this bill up providing for a short extension. My fears have been accentuated by what has happened and what we all know has happened. It strikes the poor people. If food prices go up at this rate—they have gone up twice as much in the 2 weeks since price control went off than they did during the 3 years previously—we can see what will happen. We have had the example of 2 weeks' experience. Let us try and do something about the problem so that the people of moderate income who are now being pressed between the upper and the nether millstone have some opportunity to live on a decent basis.

The SPEAKER. The time of the gentleman from Virginia has expired.

Mr. SABATH. Mr. Speaker, I yield 4 minutes to the gentleman from Georgia [Mr. BROWN].

(Mr. BROWN of Georgia asked and was given permission to revise and extend his remarks.)

Mr. BROWN of Georgia. Mr. Speaker, the question today is whether we will send this bill to conference or undertake to pass it on the floor of the House. We have seen the folly of undertaking to write bills of this importance on the floor of the House. We have seen in the other body where one producer said: "Decontrol my commodity"; another

said, "Decontrol mine," until finally they decontrolled all foods.

I take the position that to take controls off of all foods is by far worse than no bill at all. Food is the main necessity of life, and if you irritate the people by placing controls on other things that are not essential it simply means that you will have in every community dissatisfaction, and such unfairness will tend to drive all other commodities into the black markets. We will have chaos and trouble and it will be very difficult for anybody to go back to any community in this country and defend such a position.

You have already seen, in the last few days, much higher prices on many commodities, but, through fear of extension of the price-control law which expired recently, many individuals, corporations, and firms did their best to keep commodity prices from rising. My prediction is that if we do not have control, especially on the essentials of life, where the production is far below demand, within 6 weeks from now you will see run-away prices on these commodities and the President forced to call us back, and most of the Members eager to get back, to pass a control law that will prevent inflation on commodities that are out of balance with demand.

Mr. Speaker, whenever tax bills are brought in here for consideration, involving thousands and thousands of items, if we were to have an open rule we would never pass the bills; so the policy for years and years has been to bring in tax bills, which affect all the people, under a closed rule. That principle applies here, because this is a matter that affects all the producers, all the manufacturers, all consumers, and all American citizens. It is absolute folly to undertake to write a bill of this magnitude on the floor of the House.

As long as we have commodities out of balance with demand, we must have some kind of control, at least for a short period. In my opinion, 75 percent of the people in this Chamber agree with me. The other 25 percent do not believe in any price control at all. I have no quarrel with those who do not believe in price control, they are honest in their position, but they are wrong. One thing I admire about them is they fight every inch to carry out their views. I am asking the other 75 percent: Let us get together and fight together and bring in a bill that will be workable. If I am a conferee I want Congress, not officials of OPA, to write the bill. I want a bill that is workable. I want a bill that will control the necessities of life and at the same time will bring on full production. I stated on the floor some time ago, and I repeat now, that I believe all producers, and those engaged in business of all kinds, should have as a base period the peacetime years when we had free economy, and add to that the increased cost of labor and other items. That is sound and I am for it. I have been for that all the time. I can go to any community, large or small, in the United States, and I believe I can convince 99 percent of the people that this is fair and that it is right.

In order to have a bill that we can enforce we must have public sentiment with us. If we have such a bill the black markets will disappear, because the people in the communities will say, "That is fair, that is right; you have offered the same profits made in peace years when there was no inflation and we are going to see that it is lived up to and we will report any violators of the law."

I know this common-sense plan will work because it will curb inflation and increase production, and will prevent black markets. The thing we want is a reasonable bill, so that the people, especially those with lower salaries can live and those engaged in business can make reasonable profits or at least make expenses. We did not pass the control law with the hope of preventing inflation altogether but expected the law to curb inflation. I hope we can secure a bill that will curb inflation and at the same time will bring on full production of everything.

The SPEAKER. The time of the gentleman from Georgia has expired.

Mr. SABATH. Mr. Speaker, I move the previous question on the resolution.

The SPEAKER. The question is on ordering the previous question.

The question was taken; and on a division (demanded by Mr. PHILLIPS and Mr. SHORT) there were—ayes 211, noes 64.

So the previous question was ordered.

The SPEAKER. The question is on the resolution.

The resolution was agreed to.

A motion to reconsider was laid on the table.

The SPEAKER. The Chair appoints the following conferees: Messrs. SPENCE, BROWN of Georgia, PATMAN, BARRY, WOLCOTT, CRAWFORD, and GAMBLE.

ASSISTANCE TO STATES IN MATTERS RELATING TO SOCIAL PROTECTION

The SPEAKER. The unfinished business before the House is the recommendation of the Committee of the Whole House on the State of the Union that the enacting clause be stricken from the bill (H. R. 5234) to authorize the Federal Security Administrator to assist the States in matters relating to social protection, and for other purposes.

The question is, Shall the enacting clause be stricken out?

The question was taken; and on a division (demanded by Mr. WALTER) there were—ayes 151, noes 103.

Mr. WALTER. Mr. Speaker, I demand the yeas and nays.

The yeas and nays were refused.

So the enacting clause was stricken out.

A motion to reconsider was laid on the table.

PRICE CONTROL BILL

Mr. SMITH of Ohio. Mr. Speaker, a parliamentary inquiry.

The SPEAKER. The gentleman will state it.

Mr. SMITH of Ohio. It is my understanding that the gentleman from Michigan [Mr. CRAWFORD] is not in Washington, that he is out of the country on official business. I wonder whether some other member of the Committee on Bank-

ing and Currency will be appointed in his place as a conferee on the price control bill.

The SPEAKER. The Chair has no information about the gentleman from Michigan [Mr. CRAWFORD].

FUNERAL AND BURIAL OF DECEASED VETERANS

Mr. RANKIN. Mr. Speaker, I ask unanimous consent for the immediate consideration of the bill (S. 706) to amend Veterans' Regulation numbered 9 (a), as amended, so as to increase the limit of amounts payable thereunder in connection with the funeral and burial of deceased veterans.

The Clerk read the title of the bill.

The SPEAKER. Is there objection to the request of the gentleman from Mississippi?

Mr. MARTIN of Massachusetts. Reserving the right to object, Mr. Speaker, will the gentleman explain the bill?

Mr. RANKIN. This bill is identical with the bill H. R. 571, which we passed today.

The SPEAKER. Is there objection to the request of the gentleman from Mississippi?

There was no objection.

The Clerk read the bill, as follows:

Be it enacted, etc., That Veterans Regulation Numbered 9 (a), as amended, is amended by striking out the amount "\$100" wherever such amount appears in paragraphs II and III thereof, and inserting in lieu thereof the amount "\$150."

The bill was ordered to be read a third time, was read the third time, and passed, and a motion to reconsider was laid on the table.

By unanimous consent, the proceedings by which the bill H. R. 571 was passed were vacated, and that bill was laid on the table.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. SABATH. Mr. Speaker, I call up House Resolution 708 and ask for its immediate consideration.

Mr. THOMAS of New Jersey. Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER. The Chair will count. [After counting.] Two hundred and seventeen Members are present, a quorum.

The Clerk read the resolution, as follows:

Resolved, That upon the adoption of this resolution it shall be in order to move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the act (S. 1717) for the development and control of atomic energy. That after general debate, which shall be confined to the act and shall continue not to exceed 4 hours to be equally divided and controlled by the chairman and the ranking minority member of the Committee on Military Affairs, the act shall be read for amendment under the five-minute rule. At the conclusion of the reading of the act for amendment, the Committee shall rise and report the same to the House with such amendments as may have been adopted and the previous question shall be considered as ordered on the act and amendments thereto to final passage without intervening motion except one motion to recommit.

THE DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. SABATH. Mr. Speaker, later I shall yield the usual 30 minutes to the gentleman from Illinois [Mr. ALLEN].

Mr. Speaker, this rule makes in order Senate bill 1717, the atomic-energy-control bill. The rule provides for 4 hours' general debate, after which the bill will be read for amendment. In view of the conditions, I will take some time to explain the importance of this legislation.

On October 29, 1945, 8 months ago, the Senate passed an unprecedented resolution not only authorizing and directing a special 11-member committee to study problems relating to the development, use, and control of atomic energy, but giving that special committee the power to report legislation on the subject.

After 6 months of exhaustive hearings, both in open and secret session, and after having had the outstanding military and civilian experts of the United States before the committee, that special committee unanimously reported S. 1717, and on June 1 the Senate passed the bill without a dissenting vote.

BEST-INFORMED AMERICANS WANT THIS

The most thoroughly informed people in America, the President, the Secretaries of War, Navy, and State, Mr. Bernard Baruch, the National Research Foundation, the atomic scientists, and many other outstanding Americans agreed that the McMahon bill as unanimously passed by the Senate was the best bill that could now be devised to guide this terrific new exploration into the unknown.

It is true that in the meantime an emergency bill had been prepared and reported by the Military Affairs Committees based on information available a year ago. The McMahon bill, however, as passed by the Senate, represents the ripe and considered opinions of many people, all of them qualified experts, and is the bill now recommended, without change, just as the Senate passed it.

OPINIONS VARY ON AMENDMENTS

The House Committee on Military Affairs, to whom the bill was referred, made various and sundry amendments. The experts say that none of the amendments strengthen or add to the bill. The most important amendments make it mandatory that one of the members of the Atomic Energy Control Commission shall be a representative of the armed forces, and that the director of the division of military application also shall be a representative of the armed forces.

There was no thorough agreement among the committee members.

In fact, the gentleman from Kentucky [Mr. MAY], the chairman of the committee, stated there was a wide difference of opinion in the House committee on the amendments, as did the committee in its own report—see page 4, House Report 2478. I am afraid the bill as reported by the House committee by no means represents the majority opinion of the committee. The gentleman from Kentucky [Mr. MAY] pointed out that the division of opinion was so great that nine minority Members submitted their opinions separately, although only two,

the gentleman from New Jersey [Mr. THOMAS] and the gentleman from Ohio [Mr. ELSTON], appeared before the Rules Committee.

THIS BILL SAFEGUARDS SECRETS

Mr. Speaker, I hope and trust that this rule will be adopted. All of those most interested in our national welfare from the President on down feel the amendments should be disagreed to.

The Senate bill as passed unanimously provided for full civilian control of atomic energy. That is in line with the established traditions of our Nation. Our War Department is headed by a civilian. Our Navy Department is headed by a civilian. Our Commander in Chief, the President, is a civilian. Ample provision is made in the original bill for military and naval liaison and cooperation and for preserving the secrecy of real military information.

MILITARY GOVERNMENT HERE?

The gentleman from New Jersey [Mr. THOMAS] opposed the granting of any rule and stated that the Army should control this astounding and world-shaking new knowledge, which may change the fate of all mankind, apparently because some of the civilians appointed to the Commission might believe in some kind of world government, although he did not mention that some military men might believe in military government right here.

To support his fears, the gentleman read to us what he called a report from the counsel of the Committee on Un-American Activities, Ernie Adamson. I understand that Adamson is a lawyer and not an expert on atomic fission. The gentleman stated that as a result of his brief investigation Adamson had concluded that the Army should keep permanent control over what he called the "manufacture" of atomic energy.

PROFOUND IGNORANCE DISPLAYED

It is difficult to believe, Mr. Speaker, that this so-called report should be seriously considered by anyone. It betrays a profound ignorance about the bill S. 1717 and its provisions and objectives, about the generation of atomic energy, and about the methods of adequate investigation and reporting.

It will be recalled that this man Adamson has denied that the United States has or should have a democratic form of government. If he has no more knowledge of the history and Constitution of the United States than he has of atomic fission, then that remark, too, arose from profound ignorance.

In the so-called report Adamson ascribes to a young scientist the remark that the political power of the atomic bomb was greater than its physical force. The gentleman may be astounded to know the remark is a direct quotation from an official Army report on the impact of atomic warfare on our own national defense.

WHO AUTHORIZED RELEASE OF REPORT?

I have neither time, energy, nor inclination, Mr. Speaker, to point out all the foolish and uninformed statements made by this man Adamson. I doubt very much that the chairman of the committee, the gentleman from Georgia [Mr.

Wood], who is an honorable, intelligent, and responsible representative of his State, gave any authority to the man to give publicity to these imaginings of his warped mind. If the gentleman from Georgia is on the floor, I should like to know from him if he gave Adamson any such authority.

CHARACTER ASSASSINATION BY INNUENDO

Adamson is trying to suggest that these brilliant scientists, who risked their lives every moment in the long, dangerous, and incalculably important experiments to develop the means of generating atomic energy, who worked day and night under the utmost strain, are not wholly and unimpeachably loyal to this country. It is character assassination by innuendo, by insinuation, by association of ideas.

Adamson says, for instance, the officers of the Association of Oakridge Engineers and Scientists, and I quote, "admit communication with persons outside the United States." Note how carefully this sentence is worded. There is nothing wrong, illegal, unethical, or unusual in communicating with persons outside the United States. I communicate frequently with persons outside the United States. Most of us here do. Adamson makes no charge here of any illegality; yet in the context of his absurd report the inference is conveyed that the communication is with some unfriendly power.

SECURITY OFFICERS REPUDIATE ADAMSON

One statement, however, is declared to be wholly false by the secretary of the Oakridge Scientists, E. E. Minett.

Adamson says:

The security officers at Oakridge think that the peace and security of the United States is definitely in danger.

Even that statement is ambiguous.

Minett has informed me through a telephone message that the Manhattan district engineer, Col. E. E. Kirkpatrick, authorized him to state that no such statement was made or authorized by any the security officers.

Col. David E. Shaw, security officer of the Manhattan district, also authorized the following statement:

I have not said that I consider the security of the Manhattan district in jeopardy as the result of any activity of any current group at Oakridge.

TELEGRAM FROM ATOMIC SCIENTISTS

Now, Mr. Speaker, I desire to read a telegram I received, signed by L. B. Borst, W. E. Kohn, P. S. Henshaw, and E. E. Minett for the executive committee of the Association of Oakridge Engineers and Scientists:

The testimony by Representative THOMAS before the Rules Committee of the House is typical of the delaying action of those opposing civilian control of atomic energy embodied in the McMahon bill S. 1717 as it is essential both for the national security of the United States and for the fulfillment of its foreign policies that this legislation be passed in this session of Congress. The basis of the State Department's program as carried forward by Mr. Baruch is embodied in this bill, according to Mr. Baruch's testimony before the Senate special committee on atomic energy. Furthermore the continuity of the work of the Manhattan project and the developments of atomic energy in and for this

country is established by this bill. It should be pointed out again that President Truman, the Secretaries of the War and Navy Departments, the Senate of the United States, scientists generally, and the people of the country have considered the McMahon bill as passed without opposition by the Senate as completely satisfactory for the security and welfare of this country.

As far as the statement of Representative THOMAS is concerned, that the Oakridge scientist's organizations are engaged in subversive activities, it should be sufficient to point out that since their inception the actions of these groups have been within the jurisdiction and under the surveillance of the security division of the Manhattan district. At no time have the activities of these organizations been criticized or questioned as being subversive by the Manhattan district or anyone. Therefore we respectfully urge that the Rules Committee report the McMahon bill to the House for prompt action so that the Members of the House may have the opportunity to make themselves heard on the unsatisfactory amendments to the original bill which have been made by the House Military Affairs Committee.

Signed for executive committee of the Association of Oakridge Engineers and Scientists:

L. B. BORST.
W. E. KOHN.
P. S. HENSHAW.
E. E. MINETT.

REPORT INTENDED TO CREATE FEAR

The peculiar wording of the so-called report by Ernie Adamson leaves no doubt in my mind, Mr. Speaker, and I am sure it can leave no doubt in any fair-minded person's mind, that it was intended to create fear, doubt, prejudice, and foggy emotions against much more patriotic and reliable men than this lawyer. No specific charges are made against anyone. These are meaningless statements he has made; but in an atmosphere of uncertainty they may have an unfair effect.

No one in this whole world knows the full potentialities of the discovery of how to generate atomic energy. We only know that it is the greatest triumph of human mind over nature in all history. The scientists of the whole world have taken part in this long search, which began when mathematics became a science. It is true that science knows no national boundaries. Lise Meitner, who fled from Nazi Germany, contributed greatly to the creation of the first atom bomb. Others, less celebrated, came from France, England, Canada, and most of the other United Nations.

HAS ADAMSON READ REPORTS?

Although there is no connection whatever between either the American Federation of Labor and the Congress of Industrial Organizations and the Oakridge Association of Engineers and Scientists, or most of the other organized groups of atomic scientists, his prejudice against all labor organizations impelled him to drag in references to the CIO.

Is this counsel, Mr. Adamson, so uninformed and so ignorant of what can be read in the daily newspapers that he can seriously present these fantastic statements as a report of an investigation? Is he unaware of the international nature of atomic research? In fact, has he read either the McMahon bill or the Senate and House committee reports?

EVERYONE ELSE OUT OF STEP

According to his report, everyone—the United States Senate, Mr. Bernard Baruch, the world's leading scientists and great statesmen, yes, even the President of the United States—is out of step but Ernie Adamson.

These scientists from every country, men and women, old and young, in and out of uniform, who have torn out of the bowels of the earth and out of the stunning power of man-made lightning the reluctant secrets of the sun, deserve from us, not the blackening of their names, but the highest honors we can give them; they deserve, not the unjustifiable and ignorant smearing of an Ernie Adamson, but the gratitude, the full confidence, yes, and the appreciation, of our country for what they have done.

"YOUR FLESH SHOULD CREEP"

I ask permission at this point, Mr. Speaker, to insert several paragraphs from the article in the July 13 issue of the Saturday Evening Post entitled "Your Flesh Should Creep," by Joseph and Stewart Alsop, rather than to take up the time of the House by demolishing, point by point, Adamson's superficial, meaningless, misleading and libelous so-called report:

EXTRACTS FROM YOUR FLESH SHOULD CREEP, BY JOSEPH AND STEWART ALSOP, IN THE JULY 13, 1946, ISSUE OF THE SATURDAY EVENING POST

Some months ago, in the businesslike Pentagon offices occupied by the General Staff of the United States Army, a group of young soldiers set forth on a strange adventure. The individuals in the group cannot be identified, but it can be said that they were the best the Army had—practical intellectuals, thoroughly professional, yet without professional deformation, broad in concept, and with no trace of Colonel Blimp in their make-up. If one were choosing military experts on whose judgment it was necessary to rely, these were men to choose first.

Their task was nothing less than to determine the strategic situation of the United States, as revised by the new weapons of the Second World War. The bomb that dropped on Hiroshima created a situation without precedent in history. A nation's policy must be derived from its strategic situation. That has been true since the human dawn, when the first city-state erected the first encircling wall. But until the year A. D. 1945, no nation needed to worry very much about what its strategic situation really was. Instinctively, island powers built fleets; land powers with troublesome neighbors fortified frontiers; and little powers threatened from near by sought alliances with large powers farther afield. From the time of the great Pharaoh, Menes, to the time of Franklin Delano Roosevelt, it was a reasonably simple business. The bomb changed all that.

For some months the strategic meaning of the bomb could not be calculated, for the data were not available. For some months, indeed, even the august Joint Chiefs of Staff, assembled at their polished table among their velled maps and guarded documents, could not have given you an informed and final definition of the strategic situation of this Republic.

Even now it is too early for any definition to be final. The task of the young soldiers was to prepare a tentative definition which should be, at least, expert and informed. To do that, they labored with a concentration and a desire to discover the whole truth, which are not often found in the recesses of any military staff. They have now completed their job. They have written their studies covering the basic aspects of this incredibly

complex problem, in which is bound up the life or death of our country and our world. These papers have been coordinated—to use the tired language of the staff colleges—and now represent the current thinking of the United States Army.

It has been said with reason that these young soldiers' adventure was a strange one. No duty could have been more vital. Yet the rules of the staff colleges were valueless to them. The sacred precedents of the Civil War were no more applicable than Hannibal's brilliant demonstrations of the principles of double envelopment. Furthermore, the adventure itself was far less strange than its conclusion. History shows no previous case in which military experts, asked for advice on national defense, frankly confessed that adequate armed forces, adequately equipped and supplied, did not constitute a defense that could be depended upon. Until this year of very doubtful grace, any reasonably sane staff officer would have answered the question, "What must we do to be secure?" by saying simply, "Be strong." But in the present case the answer was quite different.

We have heard a good deal of ignorant rumbling about how the men of our armed services want to "keep" the atom bomb. No doubt some of those who have not studied the problem in all its aspects have this atavistic desire. Yet the chosen experts of the General Staff, after careful study of all the immense mass of secret data available to the American Government, urgently advised that control of atomic energy must be internationalized, with the realistic safeguards in which all men believe. We have also heard innumerable hints that the services regard world organization and collective security as foolish, empty businesses. Perhaps some members of the services hold this view. Yet the final conclusion of the chosen experts has been summed up in the statement, "The only sure defense of this country is now the political defense."

That means a working effective internationalization of control of atomic energy, with adequate and genuine safeguards. That means collective security. That means a working, effective world organization, capable of settling any problem of world affairs by peaceful means. These things are the political defense. For professional soldiers to say that these things must be insisted upon as the only way of insuring the national security—and for their dictum to be officially endorsed by their equals and superiors—marks the extent of the revolution of our time. It helps to explain the new and remarkably intimate collaboration between the services and the State Department, at all levels from the weekly meetings of the three Secretaries downward, in the formulation of national policy. And it presents the curious picture of the professional soldiers stating in more hard-boiled language the same objectives as the one-world enthusiasts, although clearly seeing the difficulties of reaching those objectives. When the makers of national policy are unanimous, and when the highest professional military advice differs only in approach from the advice of the professional visionaries, it behooves every American to try to understand why this should be so.

I hope when this resolution is adopted and the bill is considered that these recommendations by outstanding Americans will be approved and the Senate bill will pass.

Mr. Speaker, I ask unanimous consent to revise and extend my remarks and include some of the names of organizations and individuals throughout the United States which have endorsed and urged the adoption of the Senate bill without amendments.

Mr. THOMAS of New Jersey. Mr. Speaker, reserving the right to object, and I shall not object, will the gentleman also include the names of the three persons who wrote the bill?

Mr. SABATH. If the gentleman will give me their names, I will.

Mr. THOMAS of New Jersey. When I get up and speak I will give the names, and then I hope the gentleman will include those three names.

Mr. SABATH. May I say to the gentleman that there was a special committee of 11 Senators appointed by the Senate, and that committee has worked on it for months and months, and I think it is manifestly unfair for the gentleman from New Jersey to leave the insinuation that these 11 outstanding Members of the Senate did not possess the ability to write the bill.

Mr. THOMAS of New Jersey. Oh, I never made any such statement. That is a misstatement. I did not say that I did not think the Senators had no ability. I asked the gentleman if he would not include the names of the 3 persons who wrote the bill. Does the gentleman say that these Senators wrote the bill?

Mr. SABATH. The gentleman is, I fear, off the subject, and I think his information is not based on facts. I am not in the habit of making misstatements. You have asked, sir, if I would include the names of the three men who wrote the bill. I have replied that I would insert the names if you would give them to me. I have already stated that a special committee of 11 outstanding Senators has worked on it for months and months. I will go further. I believe that these Senators that worked on the bill, sentence by sentence, section by section, paragraph by paragraph, are familiar with the subject. They passed on every clause and phrase. It makes no difference whether they themselves held the pen and ink or operated the typewriters with their own hands, or if they had the help and advice of other men of ability. They passed upon it. They discussed and debated it. They have agreed upon it. That bill received the unanimous approval of the committee, and it was passed by unanimous vote of the Senate. That should suffice for any man who has the interest of the country at heart, who is not trying to leave the insinuation—

Mr. THOMAS of New Jersey. Just a moment. Is the gentleman insinuating that I have not the interest of the country at heart?

Mr. SABATH. I say that anyone that has the interest of the country at heart—

Mr. THOMAS of New Jersey. All right; but is the gentleman insinuating that I do not have the interest of the country at heart?

Mr. SABATH. I did not insinuate that.

Mr. THOMAS of New Jersey. The gentleman insinuated something, and it sounded like that to me.

Mr. SABATH. The gentleman always seems to me to desire to distort my remarks unfortunately—

Mr. THOMAS of New Jersey. Then

what does the gentleman mean by "the best interest of the country at heart"?

Mr. Speaker, I demand that the gentleman's words be taken down.

Mr. SABATH. Mr. Speaker, if there is anything I said that would in any way offend the gentleman from New Jersey, I withdraw the words.

Mr. THOMAS of New Jersey. Mr. Speaker, the gentleman is out of order now. He has to sit down. He cannot stay in the well of the House.

Mr. SABATH. I have no objection if my words be taken down. Neither the Speaker nor anyone else can find I deliberately insinuated that the gentleman did not have the interest of the country at heart, nor that my words were exceptionable, but I am willing to withdraw them, Mr. Speaker, if they were objectionable.

The SPEAKER pro tempore (Mr. ZIMMERMAN). The gentleman withdraws the words objected to.

Mr. VOORHIS of California. Mr. Speaker, there is a unanimous-consent request pending.

The SPEAKER pro tempore. Without objection, the request of the gentleman from Illinois is agreed to.

There was no objection.

Mr. THOMAS of New Jersey. What was the request, Mr. Speaker?

The SPEAKER pro tempore. That he be allowed to place certain names in the RECORD. The Chair understood that the gentleman from New Jersey reserved the right to object but did not object.

Mr. THOMAS of New Jersey. Does that request take precedence over the demand that the gentleman's words be taken down?

The SPEAKER pro tempore. The gentleman withdrew the words complained of by the gentleman from New Jersey.

Mr. THOMAS of New Jersey. Did the gentleman ask unanimous consent to withdraw those words?

Mr. SABATH. Mr. Speaker, if there are any remarks the gentleman construes as offensive to him, I am willing to withdraw them.

Mr. THOMAS of New Jersey. No, the gentleman must obtain unanimous consent to withdraw them.

Mr. SABATH. I said I am willing to withdraw them.

Mr. THOMAS of New Jersey. Will the gentleman ask unanimous consent to do that?

Mr. SABATH. Yes. It is up to the Speaker to determine whether what I said was out of order. I do not know how anything I said could be construed as being out of order, or as insinuating anything objectionable; but, Mr. Speaker, if there is anything I have said that offends the gentleman from New Jersey, I ask unanimous consent that those words be withdrawn.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Illinois?

There was no objection.

ORGANIZATIONS ENDORSING M'MAHON BILL

Mr. SABATH. Mr. Speaker, in availing myself of leave to insert the names of organizations and individuals which

have endorsed S. 1717, to save space in the RECORD I shall limit myself to organizations of substance and standing. The following are but a fraction of all the communications and endorsements I have received:

Association of New York Scientists; more than 200 members of the National Academy of Scientists; Engineers and Architects Association of Southern California; Americans United for World Organization, Inc.; American Slav Congress; Committee of Catholics for Human Rights; Council for Democracy; Friends of Democracy; Independent Citizens Committee of the Arts, Sciences, and Professions; Methodist Federation for Social Services; National Citizens Political Action Committee; Southern Conference for Human Welfare; Union for Democratic Action; United Christian Council for Democracy; Writers Board; Association of Pittsburgh Scientists.

Federal Council of the Churches of Christ in America; Fellowship of Reconciliation; almost 500 members of the University of Illinois; Social Education and Action Committee of the Presbytery of Washington City; Cambridge League of Women Voters; Association of Cambridge Scientists; Association of Scientific Workers; Council for Social Action of the Congregation of Churches; National Committee for Civilian Control of Atomic Energy; Atomic Scientists of Los Alamos; Oberlin College faculty; Chicago Committee for Civilian Control of Atomic Energy; Emergency Committee on Atomic Energy of the University of Illinois; Illinois League of Women Voters; American Civil Liberties Union; Jewish Women's Council.

STATEMENT AND LIST OF MEMBERS OF NATIONAL COMMITTEE FOR CIVILIAN CONTROL OF ATOMIC ENERGY

Rather than insert an endless list of prominent individuals, I am offering an analysis of the effect of the House committee amendments to the McMahon bill submitted by the National Committee for Civilian Control of Atomic Energy, to which are appended the names of the members, which offer substantial evidence of the breadth of the endorsement through business and the professions:

NATIONAL COMMITTEE FOR CIVILIAN CONTROL OF ATOMIC ENERGY,
Washington, D. C., July 11, 1946.
The Honorable ADOLPH J. SABATH,
House of Representatives,
Washington, D. C.

DEAR SIR: Enclosed you will find some comments upon the amendments to the Atomic Energy Act (S. 1717) proposed by the House Military Affairs Committee.

The decision for civilian rather than military control of policy in the development and use of atomic energy is fundamental. The atomic bomb so strikingly dramatized military aspects of atomic energy that we forget the tremendous peacetime applications. However, potentialities for far-reaching benefits, economic, social, and medical, truly stagger the imagination.

Now is no time to change a concept of our Government—that of the military as the servant rather than the master—which has been a cornerstone of the American Republic.

It was in the framework of this broad picture—peacetime development while protecting our military obligations—that these comments were drafted. The National Commit-

tee for the Civilian Control of Atomic Energy makes these recommendations in the conviction that they are in the best interest of our country and of mankind.

Yours sincerely,

ALBERT CAHN,
Secretary.

DOMESTIC ATOMIC ENERGY LEGISLATION—COMMENTS ON THE HOUSE COMMITTEE AMENDMENTS

I. MILITARY MEMBERSHIP ON THE COMMISSION (PAGE 3, LINE 19, AND PAGE 8, LINE 2, NEW (D))

The House amendments require one and permit two members of the Atomic Energy Commission to be members of the armed forces. The question is raised, "What harm can this minority position cause?" The arguments against these provisions are as follows:

A. Since 1870, a statute in this country has prohibited a military officer on active duty status from occupying any position in the civilian government. This statute carried out the fundamental and traditional separation of the military and the state embodied in our Constitution. While special individual statutes have been passed from time to time to permit a military officer to occupy a civilian post, there has never been any previous instance in which a member of the military forces was permitted to occupy a civilian position with a continuing responsibility to the military department. It should be noted that the amendment does not say that the military man is relieved of military responsibility, but, to the contrary, expressly provides that he shall be a representative of the military department.

B. This provision is harmfully unnecessary. The direct interests of the armed forces and the country's defense requirements are completely protected by the military liaison committee. This committee has the right to be kept informed on all matters which it (the committee) deems to relate to the interests of the armed forces; it has the right to appeal any action or failure to act by the Commission, through the Secretaries of War or Navy, to the President. Thus an entire body is studying and looking out for the military interests of the country. A minority position of members of the armed forces upon the Commission would weaken the position of the liaison committee, as it would often be felt that the members on the Commission gave adequate expression to the defense needs of the country. The presence of the military liaison committee has been expressly approved by the Secretaries of War and of the Navy and by General Eisenhower as the desirable treatment of military interests. All are specifically opposed to having any member of the armed forces serve as a member of the Commission.

In addition, the basic decisions as to how much fissionable material shall be manufactured and how many bombs shall be built are made by the President, presumably after consulting with the military departments as well as the Commission.

C. Requiring military membership on the Atomic Energy Commission compromises the United States claim of peaceful intentions with regard to atomic energy in the conduct of our international negotiations. No matter how eloquent our protestation that we are interested in developing atomic energy exclusively for peacetime uses, words cannot undo the fact of military membership on the Atomic Energy Commission in the United States.

D. The military departments are a claimant agency from the Commission. It is a simple principle of fairness that the group having the power of decision be independent of any of the claimant groups. It is impossible to expect and unfair to ask the military representative to disregard a prefer-

ence for military requests in balancing these requests against those desirable for civilian development.

E. The military member(s) of the Commission would have a divided loyalty. They would be responsible to their military superiors. At one and the same time they would be responsible to the public as members of a Commission whose responsibilities extend beyond military considerations to civilian uses of atomic energy. This would at least enhance dissension in the Commission with a consequent reduction of efficiency. Even the best person would make a different decision if he were responsible solely to the military departments than if he were responsible to the public as a whole, including national defense responsibilities.

F. Management of the nation's atomic energy resources manifestly requires the greatest possible efficiency, particularly in obtaining the peacetime benefits of this new source of energy. Without going into the merits, there is a substantial body of opinion that military officers are not the best qualified men for directing an enterprise of this type. Whether the abuses of military officers in the conduct of economic functions are greater or less than mistakes made by civilians, the fact remains that civilian officials are responsible directly to the public through simple power of removal by the President or on demand of the Congress because these appointive officials are obliged to stand for election or reelection. Military officers appointed to represent the armed forces are not subject to loss of their commissions by any public criticism or criticism of the President or of the Congress; to the contrary, their chances of further promotion generally depend directly upon the zeal with which they discharge the orders of their superiors who bear no official connection with the Atomic Energy Commission. In short, democracy works for civilian officials, but the essential elements of a permanent military hierarchy are sharply different from democratic responsibility.

II. MILITARY OFFICER AS DIRECTOR OF MILITARY APPLICATIONS DIVISION (P. 5, LINE 23)

In many respects detailing a military officer to hold the position of Director of Military Applications Division is objectionable on the grounds outlined above.

The functions of the Military Applications Division will probably be to conduct military research and to convert fissionable material into atomic bombs.

During the war all of these activities were under the direction of a civilian, Dr. Oppenheimer; today, they are still under the direction of a civilian, Dr. Bradbury.

III. PRODUCTION OF ATOMIC WEAPONS (P. 22, LINES 21, 23, AND 25)

This amendment permits the President to authorize the armed forces to manufacture atomic bombs. This amendment is undesirable for two reasons.

A. Like military membership on the Commission, permitting the armed forces to manufacture atomic bombs is a direct contradiction of the position taken by the United States in international negotiations that we are interested only in the development of atomic energy for peaceful purposes. Our integrity is certainly made questionable by statutory unwillingness to give a civilian commission exclusive authority over all atomic energy activities in the United States. In fact, the international arrangement we proposed would require that facilities for the production of atomic bombs be handled in the same way as other atomic energy resources.

B. Permitting the armed forces independently to carry on actual manufacturing operations would divide the responsibility of the Atomic Energy Commission by, in effect, establishing a competitive agency performing

a part of its functions. This division of authority would make it more difficult to get as Commission members the high caliber personnel which this subject matter requires.

IV. CONSULTATION BEFORE CRIMINAL PROSECUTIONS (P. 31, LINES 12-15)

This amendment strikes out the requirement that the Attorney General consult with the Atomic Energy Commission before prosecutions for violation of the control of information provisions are initiated. This provision was carefully worked out to make atomic energy research attractive to competent scientists, despite the extra obligations involved. A scientist's reputation is severely injured by the mere initiation of a prosecution, regardless of whether he is ultimately acquitted. Since atomic energy is a field of sensational publicity value, and subject to possible hysteria, this consultation division was designed to assure that prosecutions would not be initiated without review by persons having the technical and scientific background necessary to determine the significance of the acts complained of.

V. COMMISSION ATTORNEYS (P. 40, LINES 16-19)

This amendment withdraws the Commission's authority to be represented by its own attorneys in court. This authority has customarily been granted to agencies charged with major regulatory responsibilities. Since litigation involving atomic energy will be highly technical, will require broad knowledge of physics, chemistry, geology, and many other subjects, it seems peculiarly unwise to handicap the activities of this agency in the manner proposed. Even if a policy against agency attorneys were to be adopted, the very great importance of the Atomic Energy Commission and its work would justify an exemption from such a policy.

VI. MISCELLANEOUS AMENDMENTS

The remaining amendments are listed and briefly commented on as follows:

A. Page 12, line 17: The meaning of this amendment is unclear. In addition, what it attempts to do is either unnecessary or is in direct conflict with other major provisions of the bill.

B. Page 18, line 6 and line 10: A picayune change which loses the benefit of the statutory definition.

C. Page 19, line 11: The only amendment to the Senate committee bill adopted on the floor by the Senate. No comment.

D. Page 21, line 20; page 26, line 5: These identical amendments are unnecessary and may open the door to abuses by the Commission which the original bill carefully avoids.

E. Page 25, line 12: To require licenses for atomic energy devices to be for at least a full year is to deprive the Commission of a great deal of flexibility and to ignore the obvious fact that atomic energy devices are in their infancy and developments will require many changes in any 1-year period.

F. Page 43, new section 14: This provision is either unnecessary or possibly capable of interpretation which would restrict the Atomic Energy Commission more than any other agency of the Government. If the amendment is merely intended to make the Administrative Procedure Act applicable to the Atomic Energy Commission, this is automatically taken care of by the provisions of that act.

G. Page 43, lines 21 and 23: Increasing the size of the Congressional Joint Committee. No comment.

H. Page 47, line 9: This amendment makes the Commission's injunction remedy in the atomic energy field less effective than the remedy available in the housing and price control programs.

I. Page 47, line 19, new section e: This provision like some others, is either unnecessary or a possible source of difficulty. Since existing statutes place responsibility for enforcement in the Department of Justice and the

Federal Bureau of Investigation, special statutory provision may be interpreted to restrict the Commission's activities in inspections and other information-gathering activities where it is not yet known whether violations are present.

J. Page 49, line 19: Including the Canal Zone expressly within the United States. No comment.

K. Page 49, line 19: Amendment's definition of production facilities. The amendment might narrow the definition so that it no longer applied to facilities which, in fact, are capable of producing fissionable material. The amendment is at least unnecessary and possibly harmful in this respect.

Members of the National Committee for Civilian Control of Atomic Energy: Ivan Allen, Sr., Allen-Marshall Co., Atlanta, Ga.; Stringfellow Barr, St. John's College, Annapolis, Md.; Percival F. Brundage, Prince Waterhouse Co., New York City; Cass Canfield, New York City; Mrs. John Allen Carpenter, Chicago, Ill.; Everett Case, Colgate University, Hamilton, N. Y.; Leo Cherne, Research Institute, New York City; C. A. Dykstra, University of California at Los Angeles, Los Angeles, Calif.; E. R. Embrie, Rosenwald Foundation, Chicago, Ill.; Marshall Field, New York City; Thomas K. Finletter, New York City; Ralph Flanders, Federal Reserve Bank of New England, Boston, Mass.; the Reverend Harry Emerson Fosdick, New York City; Mrs. J. Borden Harriman, Washington, D. C.; Maurice Harrison, San Francisco, Calif.; Leon Henderson, Washington, D. C.; Palmer Hoyt, Denver Post, Denver, Colo.; the Very Rev. James T. Hussey, president, Loyola College, Chicago, Ill.; Dr. Robert M. Hutchins, chancellor, University of Chicago, Chicago, Ill.; A. D. Lasker, Forty-fifth Street and Lexington Avenue, New York City; Herbert H. Lehman, Washington, D. C.; Mrs. Edward Macauley, Washington, D. C.; Philip Murray, president, CIO, Washington, D. C.; Donald Nelson, Hollywood, Calif.; William I. Nichols, editor, This Week magazine, New York City; Bishop G. Bromley Oxham, New York City; the Most Reverend Bernard J. Shiel, Chicago, Ill.; Samuel Slotkin, president, Hi-Grade Meat Packing Co., New York City; Dr. George Thomas, president emeritus, University of Utah, Salt Lake City, Utah; William H. Vanderbilt, Williamstown, Mass.; W. W. Waymack, Des Moines Register and Tribune, Des Moines, Iowa; Sumner Welles, Oxon Hill, Md.; Walter White, National Association for the Advancement of Colored People, New York City; John Hay Whitney, New York City; Arthur D. White, New York City; Beardsley Ruml, Macy & Co., New York City; Alexander Sachs, New York City; Gifford Pinchot, Washington, D. C.

CHICAGO COMMITTEE FOR CIVILIAN CONTROL OF ATOMIC ENERGY

In my own city of Chicago there are scientists of world renown who contributed substantially to the development of the means of producing atomic energy and of applying it to the bombs which devastated Nagasaki and Hiroshima. As long ago as December 8, 1945, Dr. Robert S. Mulliken, professor of physics at the University of Chicago, submitted to me a memorandum subscribed to by 210 members of the National Academy of Sciences which laid down the basic principles of the bill now under consideration, as passed by the Senate. I resist the temptation to include the names of the world-renowned scientists who signed the statement, but I have them on file.

I include, and again without the long list of prominent individuals composing the committee, a more recent letter from Mrs. John P. Welling, of the Chicago Committee for Civilian Control of Atomic Energy, 1126 East Fifty-ninth Street:

Hon. ADOLPH J. SABATH,
House Office Building,
Washington, D. C.

DEAR MR. SABATH: You asked me last night on the telephone to send you a wire giving the personnel of this committee, which is backing you in your support of civilian control of atomic energy.

I am sending this letter on our stationery instead for I know that you know Chicago so well that this list of sponsors will tell you what a cross-section of outstanding citizens are behind you. As you can see, we have presidents of universities and industry, rabbis and bishops, labor leaders, lawyers, Negro leaders, bankers, and club women—all influential with large sections of the Chicago public.

This is sent in the hope that when your committee is asked to give a rule, it may strengthen your hands as evidence of widespread public concern for immediate action on this most vital issue for our country's safety.

Very sincerely yours,

HARRIET W. WELLING,

Mrs. John P. Welling,

Chairman, Steering Committee.

TOM STOKES ON OAK RIDGE

It is with regret that I omit many similar letters, many resolutions, many statements, from groups and individuals of the highest standing, whose integrity and patriotism and earnest sincerity are beyond any aspersions, whether or not one may agree with their views. I do insert the column by Thomas L. Stokes of the Scripps-Howard feature syndicate, United Features, which appeared in this morning's Philadelphia Record:

WASHINGTON.—Oyez! Oyez! Oyez!

Bring in the prisoners, the young men of science from Oak Ridge, Tenn., the young men with a bomb on their brains like a festering tumor. Let them be shackled with chains forged of true steel, far stronger than the conscience of mankind. Let them walk in slow and measured tread, lock-step, with eyes downcast to the floor.

And let the crier go before them and call out in the voice of doom:

"Shame! Shame! Shame!"

And let a guard of husky young men of the Army surround them, bayonets fixed.

If you please, your honor, let Ernie Adamson, council of Representative RANKIN's House Committee on Un-American Activities, read the indictment and proceed with this awful case.

Go ahead, Mr. Adamson, with your indictment.

"That these Oak Ridge societies are composed of young men classified as scientific researchers or engineers." (Shame on them, shame on science!)

OH, HORRORS!

"The activities of these societies are devoted to the creation of some form of world government." (Horrendous! That puts them in a class with Bernard M. Baruch and Owen J. Roberts, who once sat on the Supreme Court, and a man named Harry S. Truman.)

"These societies are very active in support of international civilian control of the manufacture of atomic materials." (Shame on them, and shame on Harry S. Truman, and Secretary of State Byrnes, and Bernard M. Baruch again, and the leaders of England and Canada and France and Russia and Australia and all the other United Nations. Shame!)

"The officers whose statements we have taken not only admit communication with persons outside the United States, but in substance say they intend to continue this practice." (Lock them away on bread and water, with no pen and ink handy.)

"The security officers at Oak Ridge think that the peace and security of the United States is definitely in danger." (The military, then, is still the military, age without end.)

"The CIO is now making a desperate effort to unionize all workers of the reservation. We took statements from the CIO and A. F. of L. organizers. The CIO organizer was very militant and seems to be in close contact with the members of the scientific societies." (Throw them in the darkest dungeon, where they may ponder their pride and learn meekness.)

DANGER AHEAD

"If jurisdiction and control of the Oak Ridge Reservation passes into civilian hands, the political plans for exploiting the place are well advanced and there would undoubtedly be trouble in the reservation within 6 months." (Thomas Jefferson lived not far away. Hang him in effigy, too, sires.)

"One of the most surprising comments was an expression from one of the young scientists to the effect that the power of the atomic bomb was much greater from a political viewpoint than from its physical aspect." (Something must be done, gentlemen, about James F. Byrnes and Bernard M. Baruch, too, ere this day's business is over.)

"My conclusion, based upon the investigation up to date, is that the Army should exercise permanent control over the manufacture of atomic weapons." (Bring the Senate of the United States before the bar. It must be tried, too. It voted against Army control. Traitorous.)

The case is completed. Thank you, Mr. Adamson.

Take the prisoners away. They are guilty. The hangman's knot, the electric chair, the guillotine are too humane. Put them to the rack and tear their limbs from their bodies and remove that great weight from their souls and their consciences.

Mr. Speaker, I now yield 30 minutes to the gentleman from Illinois [Mr. ALLEN], a member of the committee.

Mr. ALLEN of Illinois. Mr. Speaker, I yield 7 minutes to the gentleman from Illinois [Mr. ARENDS].

Mr. ARENDS. Mr. Speaker, the bill, S. 1717, is, I believe, as important, if not more so, than any piece of legislation this House has ever considered. I believe this proposed bill is as vital as any legislation ever before any Congress. I am sure those Members who have studied the bill and the report will agree with that statement. Under general debate, and when the bill is read under the 5-minute rule, I do hope the Members of the House will study as much as possible the ramifications and the potentialities of this proposed legislation. It is so far-reaching, and so broad in scope, that it is almost incredible that we should consider granting such powers to a board of five men. This board would make of its five members literally the five most powerful individuals this Nation or the world have ever seen. In complete, total control of all matters concerning atomic energy, the most powerful energy, the most dangerous weapon or, conversely, the most beneficent power ever known to civilization, this Commission, in truth and fact, would hold the destiny—the lives and freedom of mankind—wholly within their discretion.

Up until the present time, we, the possessor of the know-how of atomic energy, control to a large extent these forces which the rest of the world, espe-

cially certain nations, want to know more about, and are determined to acquire. This commission, without asking anyone, could decide just what shall be done with the secrets of atomic energy. The commission would be required to ask no government, no other power, no people, for permission to do anything they might want, at any time they might desire, with this greatest secret of the ages. I venture to assert that it has never before been suggested that such gigantic, world-controlling powers be placed in the hands of any five men that I ever heard of.

It is expected, of course, that the five-man commission will be made up of good, patriotic, loyal American citizens appointed by and with the consent of the Senate. Mr. Speaker, we all have seen the appointment of supposedly good, true, tried, and tested citizens, only to learn later that they were humans and, therefore, subject to error. I make this statement, Mr. Speaker, so the House of Representatives may be alert to just what we are undertaking to do here today. I agree that some control of this vital force must be established, but, I repeat, we should realize that we are setting up the most totalitarian commission in all history—a group which will hold in its hands the means for the very life or death of every citizen in this country and in the whole world. The bill will permit this commission, I reiterate, to do anything it desires at any time. The commission could determine the policy of these United States of America as to what shall be done about atomic energy. This commission could take from you and from me any of our possessions; any of our property; any of our rights guaranteed under the Constitution; any of our patents—in truth and fact—anything any individual in this country now possesses, if the commission declared it to concern atomic power. We cannot now conceive that this will be done, but the truth should be faced by all Members. They should understand just what we are doing here today.

Some of us on the Military Affairs Committee thought it wise that the so-called McMahon bill should be amended in certain respects. In my years of service here I have never yet seen legislation passed by either body that was not subject to improvement by amendment. Therefore, amendments were added to the bill in the committee. Such amendments, I hope we can convince you, are improvements to the proposed legislation. Those of us on the committee who wanted to amend this bill have no objective in mind except that if this bill is to pass it should be in the best form possible, and with the Congress of the United States fully aware of its effects and implications.

The major change made in committee was the one regarding the five-man Commission to be established. As the bill passed the Senate, it called for a five-man civilian Commission. Our committee changed it in this respect: That it be mandatory for one member of the five-man Commission to be a military man, and that two military men could be appointed by the President, but not more than two. Now, I would like to ask the House what is wrong with such a

proposal. If, up to the present time, there is any group which has a more direct interest in atomic-energy matters than the military defenders of this country, I would like to know who it is. What is wrong with placing one military man on a five-man Commission with four civilian members? If there is any one military individual so strong, so smart, so capable, and so determined that he can influence four other civilians and persuade them to do as he likes, then such a man, because of his sheer ability, should be on the Commission. I cannot understand the assertion that we are destroying a civilian Commission when there are four civilians and only one military man provided for such Commission. You will hear it said here that the War Department is opposed to the proposition of one military man being placed on the Commission. Well, they certainly have never told me so. I do not believe they are opposed to it. I hope the membership will carefully think through this proposal to have one military man on the Commission. In the best interests of the country, I believe it to be a wise and proper step to take.

While there are other parts of the bill which I would like to discuss, I do not now have the time to do so. However, I want, before I conclude, to draw your attention to the patents section of this bill. When the bill is read under the 5-minute rule an amendment will be offered to strike section 11 from the bill. At the proper time I hope to offer conclusive argument in support of such an amendment. Members of the House, do not take any steps in opposition to some of the various amendments offered until you carefully consider what you are doing. I repeat, this, in my estimation, is the most important piece of peacetime legislation you have ever been called to vote upon.

CALL OF THE HOUSE

Mr. HARNESS of Indiana. Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER pro tempore (Mr. ZIMMERMAN). Evidently no quorum is present.

Mr. ALLEN of Illinois. Mr. Speaker, I move a call of the House.

A call of the House was ordered.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 223]

Adams	Crawford	Holmes, Wash.
Allen, La.	Curley	Johnson,
Anderson, Calif.	Daughton, Va.	Luther A.
Andrews, N. Y.	Davis	Johnson,
Bailey	Dawson	Lyndon B.
Baldwin, Md.	Earthman	Johnson, Okla.
Beckworth	Eberharter	Kerr
Bell	Engel, Mich.	Kilday
Bennet, N. Y.	Fellows	Ludlow
Boren	Fernandez	McGehee
Boykin	Folger	McMillan, S. C.
Bunker	Gibson	Mahon
Cannon, Fla.	Gifford	Mankin
Cannon, Mo.	Gillespie	Mansfield,
Celler	Gossett	Mont.
Chelf	Hall,	Mansfield, Tex.
Clark	Edwin Arthur	Mason
Cochran	Harris	Miller, Calif.
Coffee	Hébert	Norton
Colmer	Heffernan	O'Brien, Mich.
Cooper	Hendricks	O'Toole
Cox	Herter	Peterson, Ga.
Cravens	Hollifield	Philbin

Powell	Sheridan	Vinson
Priest	Slaughter	Vursell
Randolph	Sparkman	Welch
Reece, Tenn.	Stewart	West
Richards	Sumners, Tex.	White
Rizley	Tarver	Wickersham
Robinson, Utah	Thomas, Tex.	Wolfenden, Pa.
Roe, N. Y.	Tolan	Wood
Sadowski	Torrens	

The SPEAKER. On this roll call 340 Members have answered to their names, a quorum.

By unanimous consent, further proceedings under the call were dispensed with.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. ALLEN of Illinois. Mr. Speaker, I yield 5 minutes to the gentlemen from Ohio [Mr. ELSTON].

(Mr. ELSTON asked and was given permission to revise and extend his remarks.)

Mr. ELSTON. Mr. Speaker, I am opposed to this rule and I am opposed to the bill. I agree with what the gentleman from Illinois [Mr. ARENDS] said, that this is an important piece of legislation. Its importance, in my judgment, should be judged by the extent to which it will deprive the American people of their liberties.

I not only agree that it is an important piece of legislation but I should like to add that this is one of the most dangerous bills ever presented to Congress. I am sure that before the debate is over you will have ample proof in support of that statement.

This bill comes to us under a great fear psychology which the propagandists of the country have endeavored and are still endeavoring to create, to frighten the American people into adopting a type of legislation which will mean the surrender of more of their liberty than it is safe to surrender to any Government agency in time of peace.

What is the situation at the present time? Right now, when the world is still in a state of confusion, when the war technically is not even over, the secrets of the atomic bomb and of atomic energy are in the possession of the armed services. Some secrets may have leaked out, but the greater part of them, I hope, are still known only to this Government.

What does this bill seek to do? The President will no more than sign it, if it gets that far, than every one of those secrets, the bombs themselves, as well as the Oak Ridge plant, will be turned over to a Government bureau, and the Army will be completely divested of control and authority over such property.

When the bill first came to our committee no provision had been made for the Army and Navy to even have a representative on the commission of five, known as the Atomic Energy Commission. They said this was because of some tradition that you cannot have a man in uniform on a commission of this kind. But I submit, Mr. Speaker, that no such tradition could apply when the safety of the Nation is involved. The Army and Navy and not a Government bureau are charged with the responsibility of defending the country. You might as well transfer the Navy or the Air Forces to a Government agency. The

House Committee on Military Affairs added an amendment to the bill which will give the Army representation on the commission, but every conceivable effort, I understand, is going to be made to remove that amendment from the bill. Our committee was severely criticized in some quarters because it dared to disturb any part of this bill as it came from the other body. We were urged to report the bill without any hearings. As a matter of fact, we heard only two witnesses and another witness who came in by accident. That was all the testimony that was presented to our committee on a piece of legislation of this importance. The chairman of the Atomic Energy Commission will receive \$17,500 a year and the other members \$15,000. Five department heads will receive \$14,000 a year each, making 10 in all. However able or honest these persons may be, I submit it is a dangerous thing to take from the military authorities and turn over to bureau heads and their employees whatever secrets of atomic energy we possess.

The SPEAKER. The time of the gentleman has expired.

Mr. ALLEN of Illinois. Mr. Speaker, I yield three additional minutes to the gentleman.

Mr. AUGUST H. ANDRESEN. Mr. Speaker, will the gentleman yield?

Mr. ELSTON. I yield.

Mr. AUGUST H. ANDRESEN. We are led to believe there are thousands of foreign agents from other countries in the United States trying to get information on the atomic bomb as well as other secrets. If that is a fact, would it not be better to let this type of legislation lie over until we get more stable conditions in the world and we know what our Allies intend to do?

Mr. ELSTON. I think the gentleman has stated the situation exactly. There is absolutely no reason for this legislation. Present conditions should not be changed until there is some stability in the world, until some of the confusion is gone and until we have entered into some international agreement which will outlaw use of atomic weapons. Up to the present moment there has not been a single agreement entered into, requiring legislation of this kind. In the brief time that I have remaining I would like to make this point. It is contended that this legislation is necessary in order to create an impression on the rest of the world that we are not militaristically inclined. It is contended that if we go on manufacturing atomic bombs, we may offend other nations. In answer to this claim, I need only to call your attention to the fact that at the present time if the President of the United States wants the War Department and the Navy Department to cease the manufacture of atomic bombs, all he has to do is to direct them to cease. We do not need this legislation. As a matter of fact, this legislation is directed at the private industry of the Nation. It deals almost entirely with domestic control. If anything ever placed shackles on private industry, it is the bill that is before you today. Private industry under this bill can not make a single experiment in the development of atomic energy for in-

dustrial purposes without a license from this Government bureau. All patents having to do with atomic energy would be immediately revoked or they would be taken over by the Government. No person could invent anything without turning his patent over to the Government. The incentives provided by our present patent laws would be destroyed. Section 11 of this bill is un-American and is contrary to the constitutional principle upon which our patent system is founded.

An amendment will be offered to strike out the patent section of the bill. The Constitution provides that a patentee has the exclusive right to his patent. Yet this bill takes away that right. Of course some provision is made to compensate an inventor but we all know that the value of a patent is determined by the future. No agency or court can determine what a patent is worth until the patent has been tried. Yet, if section 11 remains in this bill, an inventor must submit his case to a patent compensation board, consisting of two or more employees of the Commission, and they determine what his patent is worth.

Mr. RICH. Mr. Speaker, will the gentleman yield?

Mr. ELSTON. I yield.

Mr. RICH. You contend, then, that without any legislation we keep atomic secrets in the hands of a few number of people. Is that correct?

Mr. ELSTON. Yes. Without this legislation the secrets of the atomic bomb remain exactly where they are now. If this legislation is passed, within 24 hours every one of the secrets will be turned over to a civilian commission.

The SPEAKER. The time of the gentleman from Ohio has again expired.

Mr. ALLEN of Illinois. Mr. Speaker, I yield 5 minutes to the gentleman from New Jersey [Mr. THOMAS].

(Mr. THOMAS of New Jersey asked and was given permission to revise and extend his remarks.)

Mr. THOMAS of New Jersey. Mr. Speaker, I am opposed to the rule and I am opposed to this bill. I agree with the gentleman from Ohio [Mr. ELSTON] that it is probably the most dangerous piece of legislation ever presented to the Congress of the United States. I can see no reason why we should take it up in the closing days of this session of Congress. In my humble opinion, this is the kind of legislation that needs a large amount of thought and a large amount of debate. We have been asked to rush it through in the last days of the session. For what reason? There was never a reason told to the members of the Military Affairs Committee why we had to rush this thing the way we are doing now.

Personally, I think there is one man in the world who is more interested in this legislation than any other one human being. That is Mr. Andrea Gromyko, the Russian delegate to the United Nations Organization. He is sitting in New York laughing up his sleeve, hoping that the Congress of the United States is going to pass the kind of a bill that will do the very thing he has been trying to get; that is, a bill that will make it possible for other na-

tions of the world to get all of the atomic secrets that we have, not only in regard to atomic energy but in regard to the manufacture of the atomic bomb.

Mr. HARNESS of Indiana. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield.

Mr. HARNESS of Indiana. Is it not true that under the war emergency power security measures this Nation is afforded greater protection than this bill would afford?

Mr. THOMAS of New Jersey. There is not any question about it. If you want to know the real purpose of the bill, read subsection 2, subparagraph (b):

PURPOSE OF ACT

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective.

Mrs. DOUGLAS of California. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. One moment and I will be glad to yield.

On a reciprocal basis I would like to know what other nations on earth, even including Canada or Britain, could give to us on a reciprocal basis anything comparable in return for the information that we could give them in connection with industrial atomic energy or in connection with the atomic bomb? What could they give us? Why, they have not got anything and they know it. The purpose of the bill is to make it possible so they will get some of the secrets so that we may get something on a reciprocal basis; but as things now stand, this is absurd for they have nothing to give.

I now yield to the gentlewoman from California.

Mrs. DOUGLAS of California. I think it is important to finish that sentence:

When enforceable safeguards against its use for destructive purposes have been achieved.

Mr. THOMAS of New Jersey. Oh, I am very glad that the gentlewoman from California brought that up, because I hope that she or someone else in the House, including a member of the Military Affairs Committee, can point out any section of the bill under which we could protect not only the present atomic bomb but protect any future actions in connection with the manufacture of an atomic bomb except in this way; and you should read section 10. Under this section when the horse has been stolen from the barn we will then take the man who stole the horse to jail. Now, would not some aggressor nation just love to pay a fine of a few dollars or \$20,000 or have one of their subjects go to jail for a period of years for the atomic bomb secrets? It would be cheap.

The SPEAKER. The time of the gentleman from New Jersey has expired.

Mr. ALLEN of Illinois. Mr. Speaker, I yield the gentleman three additional minutes.

Mr. AUGUST H. ANDRESEN. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield.

Mr. AUGUST H. ANDRESEN. I should like to ask the gentleman this question, for this is such an important matter: Considering the unsettled state of affairs in the world, does the gentleman feel that the passage of this bill would jeopardize the security of the United States?

Mr. THOMAS of New Jersey. The passage of this bill would be the quickest way possible to give the atomic-bomb secrets away, and you know what the result would be.

I want to say this to the gentleman: I am in favor of defeating this bill, keeping the status quo, keeping the secrets the way they are, maintaining Oak Ridge and the rest of the Manhattan project under military control, and wait until we see what kind of peace we are going to get in the world before we make any other move.

Mr. AUGUST H. ANDRESEN. Will it do any harm if this matter is allowed to lay over for another year?

Mr. THOMAS of New Jersey. It will do no harm whatsoever except it is going to deprive some of these people from getting some nice fat jobs; and our hearts certainly bleed over that.

Mr. RICH. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield.

Mr. RICH. If we had found a new and terribly deadly poison which distributed to the people would kill them we would keep it in our hands until we knew how to handle it safely, would we not?

Mr. THOMAS of New Jersey. There is no doubt in the world about that.

Mr. RICH. Here we have what is possibly the most deadly thing in existence, yet some amongst us advocate giving it to everybody.

Mr. THOMAS of New Jersey. Look at this ad which appears in the Washington press every day. It says: "Place the control of atomic energy in civilian hands." I will bet that the people who signed that never saw this bill, let alone having read a line of it.

Look at this part of the ad. This is smearing at its worst.

I hope today we defeat this rule, and if we cannot defeat the rule then I certainly hope we defeat the bill.

Mr. ELSTON. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield.

Mr. ELSTON. While it is true that many well-meaning and patriotic Americans favor this legislation, it is also a fact, is it not, that every Communist organization and every Communist-front organization in the country is likewise for this bill, particularly in the form in which it passed the Senate.

Mr. THOMAS of New Jersey. If anybody has any doubt of that he should read the Daily Worker each day.

Mrs. DOUGLAS of California and Miss SUMNER of Illinois rose.

Mr. THOMAS of New Jersey. I yield to the gentlewoman from Illinois.

Miss SUMNER of Illinois. Twenty years ago Mr. Soddy, Nobel Prize winner in chemistry in England, who had done a lot of work on this nuclear theory, said long ago that some day the secret would be solved but that when it came it would be very dangerous. It seems to me that

at this very minute what we are up against is a mad rush to get control of this thing that is going to be worth fortunes for some people, and those who want to get control of it do not care a rap about the security of the United States.

Mr. THOMAS of New Jersey. I thank the gentlewoman from Illinois for her contribution.

The SPEAKER. The time of the gentleman from New Jersey has again expired.

Mr. ALLEN of Illinois. Mr. Speaker, I yield 5 minutes to the gentleman from California [Mr. JOHNSON].

(Mr. JOHNSON of California asked and was given permission to revise and extend his remarks.)

Mr. JOHNSON of California. Mr. Speaker, to listen to the discussion here you would think that no one on the Military Affairs Committee is in favor of the pending bill. As a matter of fact, the majority of the members of the Committee on Military Affairs are for this bill or a reasonable modification of it.

The talk so far has been on the assumption that atomic energy and the products of atomic power are purely matters of military and national-defense concern.

That is the assumption you are following. In my opinion, this bill might be properly called a bill to provide for our survival in the future world. If you proceed on the assumption that atomic energy can only be used for military purposes, for war purposes, you might also say that civilization itself is about ready to break, crack up, and die.

Mr. Speaker, I cannot make myself believe that we can solve this problem by looking at the development of atomic power merely as a military matter. There are other implications. If you will read the Saturday Evening Post, and I hope some of you read the article which appeared in that magazine recently, you will find where the bombings in Japan were reviewed by some young Army officers, men who are looking into the future; into the next 5, 10, or 20 years. What was their conclusion? Their conclusion was that there is no military defense against atomic bombs. The only defense is the political defense. In other words, it looks to me like we have to hope and pray that we may find some way to agree with the other nations of the world to outlaw this deadly weapon, otherwise we are relegated to the same old plan that we must have more bombs, swifter rockets, swifter planes, in order to win and survive.

Mr. AUGUST H. ANDRESEN. Mr. Speaker, will the gentleman yield?

Mr. JOHNSON of California. I yield to the gentleman from Minnesota.

Mr. AUGUST H. ANDRESEN. In view of what the gentleman has said—and I agree with him that we must find some way to outlaw the use of this atomic bomb—can there be any reason why the matter should not lie over until we can reach that agreement?

Mr. JOHNSON of California. In my opinion, it would be better to handle it on a broader basis, because if you have it controlled or dominated by the Army, you will generate a suspicion among the

nations of the world that we are preparing for the atomic war and this will prevent the international understanding that is the basis for peace.

Mr. AUGUST H. ANDRESEN. Would the gentleman give it to Russia?

Mr. JOHNSON of California. I would not give it to anybody, and the bill does not provide for giving it to anybody.

Mr. AUGUST H. ANDRESEN. You give it to the scientists.

Mr. JOHNSON of California. You give it to a commission, none of whom may be scientists, and I have confidence to think that the President will appoint men on that commission who will keep the secret the same as the Army has kept it. In the bill we find provision that we cannot give away anything until we feel secure in giving it away. In other words, that we have security for ourselves.

Let me for a moment explain something about the secrets of the bomb based on the hearings I have listened to. There seems to be the idea here, and it was stated by some of my colleagues on the committee, that we are going to give away the secret of how the bomb is made. There is nothing in the bill that will permit anyone to give away the secret of the technique of making the bomb. As a matter of fact, in the hearings we had on a previous bill covering the same subject every single scientist who testified in those hearings, and there were among them some Nobel prize winners, stated emphatically that now that a bomb had been made and exploded it is only a matter of time until the scientists and the technicians of the world will develop the technique of making a similar bomb. The general principles of atomic energy have been known and are known by scientists who have studied this matter for pretty nearly 50 years. The only problem was how could they tie atomic energy together in a bundle and explode it at will? That is a technical, industrial problem and we are the only nation that knows the secret at this time, as far as I know.

There is nothing in this bill that proposes giving those secrets away. We ought to discuss this matter. We ought to approve this rule, we ought to try to find out what we can do to control atomic energy for our own welfare and for our own survival. Certainly we should be tolerant and broad enough to consider this problem, the solution of which is suggested by this bill.

The SPEAKER. The time of the gentleman from California has expired.

Mr. SABATH. Mr. Speaker, I yield 2 minutes to the gentlewoman from California [Mrs. DOUGLAS].

Mrs. DOUGLAS of California. Mr. Speaker, I hardly know where to begin because so many misstatements have already been made on the floor about this bill. But let us talk about the secrets. The possibility of the discovery of making the atomic bomb was first brought to the attention of Dr. Einstein, and then to the Army and the Navy by a man named Dr. Szilard and a man named Dr. Fermi, both scientists in this country, one of Italian origin and the other of Hungarian origin. They went to the Army, and the Army was not interested. That is no criticism of the Army. The Army itself had never done great re-

search work. That will also come out in the debate. They contract their work to private people or to scientific institutions.

Now about the secret of the atomic bomb. The scientists found this secret; the scientists kept this secret. They imposed their own regulations on secrecy from 1940 until the summer of 1942 when the Army took over and General Groves headed what became known as the Manhattan district.

When the Manhattan district was built and the pilot plants and the big plants were erected, all the blue prints had already been made by these same scientists without Army control. These scientists knew exactly what could be done. No major discoveries were made in the Manhattan district after General Groves took over.

Some have said, "We will give away the secret now if we turn it over to a civilian commission." Of course not. Los Alamos, where the bombs were made, where military weapon research was carried on during the war and where it will undoubtedly continue under this bill, has at all times been headed by a civilian—Dr. Oppenheimer, of California during the war, and now, Dr. Bradbury, also a civilian.

You cannot lock up atomic energy secrets, unfortunately. If you could, I would certainly be one of those who would advocate locking up the secret of the bomb.

The secrets that we talk about are scientific knowledge. This knowledge is in the hands of scientists and can only be understood by the scientists.

Appointing a civilian commission raises no problems. We still have to have a system of management under which the scientists keep the secrets. That is adequately provided for in this bill.

It is indeed ungrateful at this stage to question the integrity of the men who had the foresight to conceive the bomb, to have the sense of personal loyalty to impose their own rules of secrecy when the Army and the Navy spurned them and the devotion to their country to work long hours, and days, and weeks, and months, and years just in the hope that the final product would actually work. It did work and it did end the war. Dare we have the effrontery to stand on this floor now and question the integrity of these men.

So you can go on correcting statement after statement, that has been made this afternoon.

Mr. SABATH. Mr. Speaker, I yield the remainder of the time to the gentleman from Texas [Mr. THOMASON].

Mr. THOMASON. Mr. Speaker, I have a very great respect for the will and the wishes of the majority, and if this House by a majority vote wants to amend this bill, why, all well and good, but to say that a subject as important as this, not only national but international in character and consequences, will not even be considered and debated by this House at this critical time in the world's history, to me would be absolutely indefensible. I know there is a well-laid plan to defeat the rule and kill the bill, but I refuse to believe it will succeed. More than a year ago Secretary of War Stimson requested the President of the United States to set up an Atomic Energy

Commission in order to study this powerful weapon, because he already knew what the effect on Hiroshima would be. On that committee he was named chairman, and with him were: James F. Byrnes, then a private citizen; Will Clayton, Assistant Secretary of State; Ralph Bard, Under Secretary of Navy; George Harrison, Special Assistant to Secretary of War; Dr. Vannevar Bush, Chairman of the Office of Scientific Research and Development; Dr. Karl Compton, president, Massachusetts Institute of Technology; Dr. James Conant, president, Harvard University.

The special committee was assisted by a scientific panel drawn from the most eminent scientists working on the atomic energy project: Dr. J. R. Oppenheimer, Dr. E. O. Lawrence, Dr. Arthur H. Compton, Dr. Enrico Fermi.

They unanimously agreed that it was highly important and very necessary that this type of legislation be enacted at the earliest possible time. Pursuant to the report a special committee was set up in the Senate of the United States, and in view of the statements of my good friend, the gentleman from Ohio [Mr. ELSTON], and my good friend, the gentleman from New Jersey [Mr. THOMAS], that all the Communists are supporting this bill, and leaving the inference that they are the only ones. I would like to read for the RECORD the names of the Senate special committee:

The chairman was the Senator from Connecticut [Mr. McMAHON]. The other Members were the Senator from Georgia [Mr. RUSSELL], the Senator from Virginia [Mr. BYRD], the Senator from Colorado [Mr. JOHNSON], the Senator from Maryland [Mr. TYDINGS], the Senator from Texas [Mr. CONNALLY], the Senator from Vermont [Mr. AUSTIN], the Senator from Colorado [Mr. MILLIKIN], the Senator from Iowa [Mr. HICKENLOOPER], the Senator from Connecticut [Mr. HART], and the Senator from Michigan [Mr. VANDENBERG]. They worked 5 months on this bill, had hearings that required four large volumes to print, listened to the greatest scientists, military leaders, and businessmen in our country, and then unanimously reported this bill providing for a civilian commission with military liaison. That is only half the story, for later the Senate passed the bill unanimously.

Mr. ELSTON. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. No.

Mr. ELSTON. The gentleman mentioned my name.

Mr. THOMASON. I decline to yield, Mr. Speaker.

These distinguished and patriotic Senators unanimously reported this bill. I beg of you not to prejudge it. I beg of you not, because somebody says there are some engaged in un-American activities or there are some Communists for this bill, to say to a group of men like those on the Senate committee and that group of men named by Secretary Stimson and the President of the United States, that they have not used good judgment and prompted by what they think is for the best interests of this country.

Mr. ELSTON. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. No, I decline to yield. There will be 4 hours of general debate. The gentleman can say all he wants to. Do not kill this rule and you will have lots of time to talk.

But to say that in these terrible days, with a weapon like this, the like of which has never been known in the scientific history of mankind—

Mr. THOMAS of New Jersey. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. No, I do not yield. You have 4 hours to talk about it. I have declined two times to yield.

To say in this critical time, with men like those I have mentioned giving hearty and unanimous support to this bill, and with its passing the Senate by a unanimous vote, that we will not even consider it under the rule, that would be preposterous and outrageous. I do not see how anybody could defend his record on such a vote. Go ahead and amend the bill if you want to but before you do it take a look at page 7, line 5, of the bill regarding the Military Liaison Committee, which Secretary Patterson testified before the Committee on Military Affairs was entirely satisfactory to him and General Eisenhower. They are both strong for the Senate bill so there are some good people for this bill besides Communists. The high command of both the Army and Navy has endorsed this bill, so it cannot be all bad. Then say to me or say to this House that by some kind of hokus-pokus and getting us off on a sidetrack or drawing a red herring across the trail you will not even consider it is out of the question. I refuse to believe you will do it, and I feel confident that the rule will be adopted by a large majority.

Mr. SABATH. Mr. Speaker, I move the previous question on the resolution.

The previous question was ordered.

The SPEAKER. The question is on the resolution.

The question was taken; and on a division (demanded by Mr. HARNESS of Indiana) there were—ayes 162, noes 35.

So the resolution was agreed to.

A motion to reconsider was laid on the table.

JOINT COMMITTEE TO INVESTIGATE THE PEARL HARBOR ATTACK

Mr. MURPHY. Mr. Speaker, I ask unanimous consent for the immediate consideration of Senate Concurrent Resolution 72.

The Clerk read the concurrent resolution, as follows:

Resolved by the Senate (the House of Representatives concurring), That the time for filing the report of the Joint Committee To Investigate the Pearl Harbor Attack be, and it is hereby, further extended to July 22, 1946, inclusive, and that the said committee be, and it is hereby, authorized to continue up to and including July 31, 1946, inclusive, the employment of necessary clerical assistants to complete the performance of its duties and to pay incidental expenses incurred in connection therewith.

The SPEAKER. Is there objection to the request of the gentleman from Pennsylvania?

Mr. MARTIN of Massachusetts. Mr. Speaker, reserving the right to object, is this a unanimous report of the committee?

Mr. MURPHY. It is a unanimous report. The only purpose of having an extension of time is so that the report can be printed and made available to the press for study so that the Nation will have the proper coverage. It was unanimously agreed to. The gentleman from Wisconsin [Mr. KEEFE], who is one of the Members on the minority side, is here in the Chamber. I have consulted with him. It was agreed to by the full committee.

Mr. RICH. Mr. Speaker, will the gentleman yield?

Mr. MARTIN of Massachusetts. I yield.

Mr. RICH. We had an extension of this last week for 8 days, appropriating about \$25,000. Are you going to ask for any additional appropriation?

Mr. MURPHY. No. There is enough money but it is just a question of giving the people the facts.

Mr. RICH. You can give the people considerable facts without a lot of expenditure.

The SPEAKER. Is there objection to the request of the gentleman from Pennsylvania?

There was no objection.

The Senate concurrent resolution was agreed to.

A motion to reconsider was laid on the table.

DEPARTMENT OF LABOR, FEDERAL SECURITY AGENCY APPROPRIATIONS, 1947—CONFERENCE REPORT

Mr. HARE. Mr. Speaker, I call up the conference report on the bill (H. R. 6739) making appropriations for the Department of Labor, the Federal Security Agency, and related independent agencies, for the fiscal year ending June 30, 1947, and for other purposes.

The Clerk read the title of the bill.

Mr. MAY. Mr. Speaker, a parliamentary inquiry.

The SPEAKER. The gentleman will state it.

Mr. MAY. Mr. Speaker, I merely want to inquire as to the length of time that might be consumed on the conference report in view of this particular situation: every Member who discussed the rule on the atomic bomb control bill stated that it was one of the most important pieces of legislation that has ever been presented to the Congress. It is vitally important. I feel that if we are compelled to wait here for another hour and then start general debate on that at 4 o'clock in the afternoon it would be unfair to the House unless they want to stay here late in the evening to do so. I believe it ought to be understood that that would be passed over until tomorrow morning.

The SPEAKER. That would be a matter for the House to determine. Of course, the consideration of bills making appropriations to run the departments of government is very important.

Mr. MAY. I realize that, Mr. Speaker.

The SPEAKER. The Chair must recognize the gentleman from South Carolina [Mr. HARE] to call up the conference report. It is a matter for the House to determine whether it wants to sit after the conference report has been disposed of.

The Clerk will read the conference report.

The Clerk read the conference report. (For conference report and statement, see proceedings of the House today.)

The SPEAKER. The Clerk will report the amendment in disagreement.

The Clerk read as follows:

Senate amendment No. 39: Page 46, line 23, strike out all after "1501-11)" over to and including "Code" in line 4, page 47.

Mr. HARE. Mr. Speaker, I move that the House further insist on its disagreement to the amendment of the Senate numbered 39.

Mr. KEEFE. Mr. Speaker, I offer a preferential motion.

The Clerk read as follows:

Mr. KEEFE moves that the House recede and concur in the Senate amendment numbered 39.

Mr. HARE. Mr. Speaker, I yield 30 minutes to the gentleman from Wisconsin [Mr. KEEFE] to be disposed of as he sees fit.

Mr. KEEFE. Mr. Speaker, I yield myself 10 minutes.

Mr. Speaker, this is a very important matter. The entire appropriation bill for the Federal Security Agency and the Labor Department is being held up.

What we do this afternoon will determine whether or not the Congress of the United States is going to permit one of its great supply bills to get into such a state of impasse that we cannot complete the legislation.

The situation is simply this: There was written into this bill on the floor of the House what is known as the Elliott amendment. That amendment simply means that none of the funds provided for the National Labor Relations Board can be expended in the determination of collective bargaining representation by the National Labor Relations Board in the California cannery industry. In other words, it substitutes for the language defining agriculture that is found in the National Labor Relations Act, the language taken from another act, namely, the Social Security Act.

I do not care to discuss the merits of that proposal. You can continue to vote, if you want to, to keep the Elliott amendment in this bill. The thing I want my colleagues to know is that we have done everything humanly possible in the conference to carry out the expressed will of this House and to keep the Elliott amendment in the bill. We are unable to reach an agreement with the Senate. By an overwhelming vote the Senate has voted to strike that amendment from the bill. The House has told the conferees to keep that amendment in the bill. There we sit. It must either stay in the bill or come out of the bill, if there is to be any agreement. See what we are doing as a result. We are blocking the entire legislation and we are jeopardizing a most important provision in that bill. That is the agreement that has been reached to return the employment services back to the States, a matter in which I am most vitally interested as a Member of this Congress.

Now, what is the situation? I do not care whether you believe the Elliott amendment is good or bad. That is not

the issue that confronts us this afternoon. Those arguments have been had on the floor. The House has voted they want to keep the amendment in the bill. The Senate has said with equal vigor that the amendment must go out. This morning in the conference we as the House conferees were told in no unmistakable language that this bill will be tied up for the rest of the year, and they never will consent to recede.

Now, what is our responsibility? That compels me as a conferee to examine my responsibility and the responsibility of the House. Matters of legislation can only result from the joint action of the two Houses. We cannot always have our way as we might want to have it, and unless we can agree, legislation fails; and on an important matter of this character you are taking away from the employees of these two great Departments their pay rolls.

I have examined the record of this matter. When this original amendment was offered by the distinguished gentleman from California [Mr. LEA] to a previous bill the record discloses that no point of order was raised against that amendment. No point of order was suggested against the amendment when it was offered by the gentleman from California [Mr. ELLIOTT] this year. I am firmly convinced from a study of the rules and the decisions that had a point of order been raised against the amendment, it would have been eliminated in the House on the point of order.

The distinguished Senator from Utah [Mr. MURDOCK], a former Member of this House, in the conference committee this morning made an argument which in my opinion is infallible and unanswerable. He pointed out with very great clarity and logic the fact that this amendment is legislation on an appropriation bill. I call your attention if I may at this time to the rulings on that subject which are found on page 392 of the House Rules and Manual:

In construing a proposed limitation, if the Chair finds the purpose to be legislative and that the intent is to restrict executive discretion to a degree that may be fairly termed a change in policy rather than a matter of administrative detail he should sustain the point of order. (Chairman Luce, January 8, 1925, 68th Cong., 2d sess.)

The same ruling was made by Chairman Crisp on March 11, 1916, in the Sixty-fourth Congress.

In the argument in the conference this morning it was distinctly pointed out that the action of the House in inserting this amendment into the bill on the floor of the House constitutes legislation on an appropriation bill in violation of those two rulings that appear in the House rules. This is true because the amendment restricts executive discretion to a degree that may be fairly termed a change in policy. Is it a change in policy? Why, of course it is a change in policy. Under the terms of this amendment, if it is retained in the bill, it compels the National Labor Relations Board to completely change the policy that is set out in the established law of the land, the National Labor Relations Act.

The SPEAKER. The time of the gentleman from Wisconsin has expired.

provide for civil service ratings for employees of public or private organizations which become a part of the Federal Government (p. 9307).

Passed without amendment H.R. 4651, to amend the Civil Service Retirement Act so as to provide annuities for a recovered disability annuitant who through no fault of his own fails to obtain reemployment (p. 9307). This bill will now be sent to the President.

Passed with amendment H.R. 4718, to provide optional retirement for Government officers and employees with 25 years of service, who are involuntarily separated from the service Between July 1, 1945, and June 30, 1947 (p. 9327-8). Sens. Downey, George, Byrd, Langer, and Hart were appointed conferees (p. 9328).

Passed without amendment H.R. 5831, to include the heads of executive departments and agencies within the purview of the Civil Service Retirement Act (p. 9329). This bill will now be sent to the President.

Passed without amendment H.R. 6673, to amend the Civil Service Retirement Act so as to prohibit a Federal employee from receiving, simultaneously, an annuity under the Act and compensation for injury or disability under the Employees Compensation Act (p. 9329). This bill will now be sent to the President.

Passed without amendment H.R. 6903, to provide an adjustment for the within-grade promotions for veterans, on probationary appointments prior to entry into the service, in cases where, because of military service, they were unable to accept appointment when their names were first reached on the register (p. 9329). This bill will now be sent to the President.

Passed as reported H.R. 6532, to permit department and agency heads to designate disbursing officers to make payments of claims directly to Government employees and former employees for the difference between amounts for overtime, leave, and holiday compensation computed at night rates pursuant to Comptroller General decisions (p. 9320). This bill applies only to those employees in the several trades and occupations whose compensation is fixed by wage boards or other wage-fixing authorities and who received a differential for work performed at night.

Passed with amendment H.R. 5590, to provide for the uniform administration of efficiency ratings (pp. 9326-7).

Set aside, on request of Sen. Ball, Minn., the passage of S. 2183, to authorize heads of executive departments and agencies to grant scientific, technical, and professional employees leaves of absence for advanced research and study (pp. 9328-9).

Passed as reported S. 1561, to make effective as of Jan. 1, 1942, the 100% earning provisions of the act which entitles employees of contractors with the U.S. outside the U.S. to compensation for injury, death, or detention (pp. 9308-9).

Passed over on objection of Sen. Ball, Minn., H.R. 4051, to grant to enlisted personnel of the armed forces certain benefits in lieu of accumulated leave (pp. 9332-3).

Began debate on S. J. Res. 61, to amend the constitution so as to provide for equal rights for women (pp. 9345-6, 9349-55).

Discussed and

19. ASSISTANT SECRETARIES OF AGRICULTURE. /passed over on objection of Sen. Wherry, Nebr., S. 1923, to provide for two additional Assistant Secretaries of Agriculture (p. 9317).

20. PRICE CONTROL. Sen. Wherry, Nebr., discussed conditions in the livestock markets since the removal of price controls, claiming that receipts are greater than for the comparable period last year, and that prices, considering the removal of subsidies are not unreasonable; reported conditions in the butter market; discussed prices on finished goods in Washington to show that increases have not been unreasonable; and inserted an American Meat Institute report, "An Examination of the Government Food Subsidy Program," prepared by the U.S.

Chamber of Commerce, Agriculture Department, and other statements on food and clothing prices since the removal of price control (pp. 9355-66).

21. WOOL. Sen. Morse, Oreg., urged passage of S. 2033, to provide for price support, standards work, and research on wool (p. 9366).
22. NOMINATIONS. Confirmed the nominations of James R. Isleib to be Land Bank Commissioner (FCA) and R.M. Littlejohn to be War Assets Administrator (his nomination was reported earlier by the Military Affairs Committee) (pp. 9369-70).
23. WOOL MARKETING. S. 2033, as reported by the Agricultural and Forestry Committee, (see Digest 193) eliminates the provision for support payments as one means of price support and the permanent indefinite appropriation of receipts from practical-forms fees.

HOUSE

25. THIRD DEFICIENCY APPROPRIATION BILL. Received the conference report on this bill, H.R. 6885 (pp. 9375-7). The conference report provides \$10,000 for salaries and expenses, BDI; \$141,000 for inspection and quarantine, BAI (includes Senate amendment providing \$85,000 for Swan Island quarantine station which is reported in technical disagreement, but it will be moved that the House recede and concur); and the conferees proposed an amendment to the language (inserted by the Senate) authorizing CCC to purchase surplus potatoes, which will read as follows: "Notwithstanding any other provision of law, the Commodity Credit Corporation is authorized to purchase surplus potatoes (including sweet potatoes) produced during the year 1946 and to process and sell such potatoes to any foreign country, and, upon requisition, to the Army and to the United Nations Relief and Rehabilitation Administration for the relief of hungry people."
26. SOCIAL SECURITY. The Rules Committee reported a resolution for the consideration of H.R. 7037, to amend the Social Security Act (pp. 9377; 9412).
27. RESEARCH; ATOMIC ENERGY. Began debate on S. 1717, the atomic-energy bill (p. 9377-403).
28. SURPLUS PROPERTY. The Expenditures in the Executive Departments Committee reported with amendments S. 1636, to amend the Surplus Property Act to designate the State Department as the disposal agency for surplus property outside the continental U.S. (H.Rept. 2546) (p. 9412).
29. PRICE CONTROL. Rep. Smith, Ohio, was appointed a conferee on the price-control extension measure in place of Rep. Crawford, Mich. (p. 9372).
30. PUBLIC DEBT. Rep. Rich, Pa., called for reduction in the national debt (pp. 9372-3).
31. GRAIN SHORTAGE. Received a Syracuse, N.Y., citizens' petition protesting against the recent USDA order reducing the amount of grain to be allocated to the brewing industry (p. 9413).

BILLS INTRODUCED

32. PUBLIC LANDS; VETERANS. S. 2449, by Sen. Mitchell, Wash., to extend to veterans of World War II preference with respect to the sale of lands disposed of under the Columbia Basin Project Act. To Public Lands and Surveys Committee. (p. 9298.)

the House, and appropriates \$3,800,000 additional for rivers and harbors, under "Civil functions, Corps of Engineers," as proposed by the Senate, instead of \$2,500,000, as proposed by the House.

Amendment No. 88: Appropriates an additional amount of \$15,116 for salaries, United States Supreme Court, fiscal year 1947, as proposed by the Senate.

Amendments Nos. 89 and 90, relating to surplus appropriation rescissions: Rescinds \$320,596 of funds available for access roads, Public Roads Administration, instead of \$641,193, as proposed by the House, and no rescission, as proposed by the Senate, and rescinds \$199,000 of the maritime training fund, Coast Guard, as proposed by the Senate, instead of \$274,325, as proposed by the House.

Amendments Nos. 91 to 118, inclusive, relating to judgments and authorized claims: Appropriates \$8,720,457.59, as proposed by the Senate, instead of \$5,860,420.91, as proposed by the House.

AMENDMENTS IN DISAGREEMENT

Amendment No. 33, relating to the appropriation for the United Nations Relief and Rehabilitation Administration. It will be moved to insert in lieu of such amendment the following:

"without any deletions or modifications by censorship of their reports dealing with such subjects: *Provided further*, That none of the funds herein appropriated shall be used for the transportation, delivery, or distribution of any supplies, commodities, or equipment to or for any recipient country until the Director General of the United Nations Relief and Rehabilitation Administration has advised the Secretary of State that such country has arranged for the prompt distribution of such supplies, commodities, and equipment"

Amendment No. 34, relating to surplus property, care and handling. It will be moved to insert in lieu of such amendment, the following:

"SURPLUS PROPERTY, CARE AND HANDLING

"Surplus property, care and handling: That current naval and military appropriations shall be available for the care and handling of property wherever situated declared surplus to disposal agencies pending reimbursement for such expenses by such disposal agencies or in consequence of supplemental appropriations hereafter made directly to the owning agencies, any law to the contrary notwithstanding: *Provided*, That reimbursement shall not be made for pay and allowances and subsistence of military and naval personnel within the numbers appropriated for heretofore."

Amendment No. 46, relating to veterans' educational facilities, Bureau of Community Facilities. It will be moved to recede and concur in such amendment with an amendment making the appropriation \$75,000,000, instead of \$100,000,000, and limiting the amount for administrative expenses to \$3,000,000 instead of \$4,000,000.

Amendment No. 51, relating to the United States Maritime Commission. It will be moved to recede and concur in such amendment.

Amendment No. 52½, relating to the operation of canteens by the Veterans' Administration. It will be moved to recede and concur in such amendment with an amendment providing an appropriation of \$4,000,000, instead of \$5,000,000.

Amendment No. 60, appropriating an additional amount, fiscal year 1947, for inspection and quarantine, Bureau of Animal Industry, Department of Agriculture. It will be moved to recede and concur in such amendment.

Amendment No. 62, relating to the Commodity Credit Corporation. It will be moved to insert in lieu of such amendment the following:

"COMMODITY CREDIT CORPORATION

"Notwithstanding any other provision of law, the Commodity Credit Corporation is authorized to purchase surplus potatoes (including sweetpotatoes) produced during the year 1946 and to process and sell such potatoes to any foreign country, and, upon requisition, to the Army and to the United Nations Relief and Rehabilitation Administration for the relief of hungry people."

Amendment No. 63, relating to the transfer of funds from the appropriation "Compiling census reports, and so forth, 1946," to the Bureau of Standards. It will be moved to recede and concur in such amendment.

Amendment No. 64, amending the appropriation in the Department of Commerce Appropriation Act, 1947, for the compilation of foreign trade statistics. It will be moved to recede and concur in such amendment.

Amendment No. 69, appropriating additional amounts for the construction of reclamation projects.

Amendment No. 77, lifting the existing limitation upon allowances for living quarters of Foreign Service personnel as to such personnel serving at posts in certain specified countries. It will be moved to recede and concur in such amendment.

Amendment No. 81, relating to the replacement or rehabilitation of facilities in the Philippine Islands.

Amendment No. 86, providing for mustering-out payments to certain former members of the armed services. It will be moved to recede and concur in such amendment.

Amendment No. 119, increasing from \$1,050 to \$1,300 the previously established ceiling price to be paid for passenger-carrying automobiles. It will be moved to recede and concur in such amendment.

Amendment No. 120, repealing previously enacted provisions limiting passenger-automobile procurement to used or surplus vehicles. It will be moved to recede and concur in such amendment.

Amendment No. 121, changing a section number. It will be moved to recede and concur in such amendment.

CLARENCE CANNON,
LOUIS C. RABAUT,
W. F. NORRELL,
JAMIE L. WHITTEN,
JOHN TABER (except
as to amendment
No. 64),
EVERETT M. DIRKSEN,

Managers on the Part of the House.

CALL OF THE HOUSE

Mr. THOMAS of New Jersey. Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER. Evidently a quorum is not present.

Mr. MCCORMACK. Mr. Speaker, I move a call of the House.

A call of the House was ordered.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 225]

Adams	Courtney	Harris
Allen, Ill.	Cox	Hébert
Allen, La.	Cravens	Hendricks
Anderson, Calif.	Crawford	Hoffman, Mich.
Andrews, N. Y.	Crosser	Hollfield
Arends	Curley	Holmes, Wash.
Baldwin, Md.	Daughton, Va.	Hook
Beckworth	Davis	Johnson,
Bennet, N. Y.	Dawson	Lyndon B.
Boren	Earthman	Johnson, Okla.
Boykin	Engel, Mich.	Jonkman
Bunker	Fallon	Kerr
Byrne, N. Y.	Fernandez	Kilday
Camp	Gardner	King
Cannon, Fla.	Gibson	LaFollette
Clements	Gillespie	Ludlow
Cochran	Goodwin	McGehee
Coffee	Gossett	McGlinchey
Colmer	Hall	McGregor
Cooper	Edwin Arthur	McKenzie

McMillan, S. C.	Powell	Sumner, Ill.
Mahon	Priest	Talbot
Mankin	Reece, Tenn.	Tarver
Mansfield,	Reed, Ill.	Tolan
Mont.	Robinson, Utah	Torrens
Mansfield, Tex.	Roe, N. Y.	Vinson
Mason	Rogers, N. Y.	Vursell
Merrow	Rooney	Weaver
Miller, Calif.	Sabath	Welch
Monroney	Sadowski	West
Morrison	Sasscer	Wickersham
Norton	Sheridan	Willson
Patrick	Slaughter	Wolfenden, Pa.
Peterson, Ga.	Sparkman	Wood
Pfeifer	Stewart	
Plumley	Stigler	

The SPEAKER. On this roll call 328 Members have answered to their names, a quorum.

By unanimous consent, further proceedings under the call were dispensed with.

AMENDING THE SOCIAL SECURITY ACT AND THE INTERNAL REVENUE CODE

Mr. CLARK, from the Committee on Rules, reported the following privileged resolution (H. Res. 710, Rept. No. 2530), which was referred to the House Calendar and ordered to be printed:

Resolved, That upon the adoption of this resolution it shall be in order to move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H. R. 7037) to amend the Social Security Act and the Internal Revenue Code, and for other purposes, and all points of order against said bill are hereby waived. That after general debate, which shall be confined to the bill, and shall continue not to exceed 1 hour, to be equally divided and controlled by the chairman and the ranking minority member of the Committee on Ways and Means, the bill shall be considered as having been read for amendment. No amendment shall be in order to said bill except amendments offered by direction of the Committee on Ways and Means, and said amendments shall be in order, any rule of the House to the contrary notwithstanding. Amendments offered by direction of the Committee on Ways and Means may be offered to any section of the bill at the conclusion of the general debate but such amendments shall not be subject to amendment. At the conclusion of the consideration of the bill for amendment, the Committee shall rise and report the bill to the House with such amendments as may have been adopted, and the previous question shall be considered as ordered on the bill and amendments thereto to final passage without intervening motion, except one motion to recommit.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

The SPEAKER. The Chair recognizes the gentleman from Kentucky [Mr. MAY].

Mrs. LUCE. Mr. Speaker, will the gentleman yield?

Mr. MAY. I yield to the gentlewoman from Connecticut.

Mrs. LUCE. Mr. Speaker, in view of the transcendent importance of the legislation before us, which quite literally will affect the destiny of nations and the security of millions of lives, it may well be that the time allotted for the debate is inadequate. Moreover, there are many Members, I gather, who would like to make remarks but cannot do so in the time as now fixed. I therefore ask unanimous consent that the time for general debate be extended two additional hours.

Mr. MCCORMACK. Mr. Speaker, reserving the right to object, if the chair-

man of the committee wants to ask unanimous consent to extend the time 1 hour, that is perfectly agreeable, but we have other important matters which must be disposed of.

Mrs. LUCE. There is no matter more important than this. Millions of lives may be affected by this legislation.

Mr. McCORMACK. Most Members know how they are going to vote on this matter.

Mrs. LUCE. If they do, they know almost more than those of us who have been working on this matter for 6 months, because we are confused, and we have studied it thoroughly.

Mr. McCORMACK. The gentlewoman recognizes that I said we were willing to extend the time 1 hour. The gentlewoman has that concession.

Mr. MAY. Mr. Speaker, I ask unanimous consent that the time for general debate be extended 1 hour, to be equally divided and controlled by the gentleman from Missouri [Mr. SHORT] and myself.

The SPEAKER. Does the gentlewoman withdraw her request?

Mrs. LUCE. I accept the exceedingly gracious compromise suggested by the gentleman.

The SPEAKER. Is there objection to the request of the gentleman from Kentucky?

Mr. ROBERTSON of Virginia. Reserving the right to object, Mr. Speaker, and I do not intend to object, if you look at the program for this week you will find that on Thursday, Friday, and Saturday we have a very full schedule, with the Social Security Act put as the last part of the schedule, to be considered Saturday afternoon or Saturday night. I am not going to object to the request, but I hope nobody else will try to extend the debate, because on the British loan at times there were not 40 Members on the floor to hear that important discussion.

Mr. KEOGH. I object, Mr. Speaker.

Mr. SHORT. Mr. Speaker, I hope the gentleman from New York, my good friend, will not object to having an extra hour of general debate. If the gentleman from New York will not object to this request, I think we will save time. Let us compromise on 1 hour.

Mr. KEOGH. I withdraw my objection, Mr. Speaker.

The SPEAKER. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

EXTENSION OF REMARKS

Mr. RANDOLPH asked and was given permission to extend his remarks in the Record and include a radio program in which four Members of Congress, including himself, participated.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. MAY. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (S. 1717) for the development and control of atomic energy.

The motion was agreed to.

Accordingly the House resolved itself into the Committee of the Whole House on the State of the Union for the consid-

eration of the bill S. 1717, with Mr. JOHN D. DELANEY in the chair.

The Clerk read the title of the bill.

By unanimous consent, the first reading of the bill was dispensed with.

The CHAIRMAN. The gentleman from Kentucky [Mr. MAY] is recognized for 2½ hours and the gentleman from Missouri [Mr. SHORT] is recognized for 2½ hours.

Mr. MAY. Mr. Chairman, I yield myself 30 minutes.

Mr. Chairman, due to the great importance of this legislation and the legislative history back of it, I feel impelled today to use some of the time I have on this subject in making an explanation of some of the misrepresentations, false rumors, and reports that have been circulated throughout the city of Washington and throughout the country and in the public press with regard to my position on the legislation.

I do not think there is any member of the House Committee on Military Affairs that will accuse me of ever willfully obstructing important legislation before that committee. This legislation came up early last year. There was sent to the House of Representatives through the Speaker's office a burning, zealous message from the President of the United States asking for the prompt and effective enactment of atomic energy legislation. That message came to the Speaker and was promptly referred to the House Committee on Military Affairs, when I immediately called committee sessions in order to hold hearings. We conducted hearings on what was then known as the May-Johnson bill. That bill was no more a May bill or a Johnson bill than it was a Jones bill. It was written in the War Department after long study and very careful consideration of the subject involved. It was sent by the President to the Speaker, as I have said, with a recommendation for speed. In order to give speed I called hearings on it on October 9, 1945. The War Department sent a very able, very conscientious, and very distinguished officer as a spokesman of the Department to present the legislation to the committee. That officer was none other than the then Under Secretary of War, now Secretary of War, Hon. Robert P. Patterson, a man who has the confidence, esteem, and admiration of the entire Congress, and deservedly so. When he came to the committee he came as he always did, with a frank, open, and plain statement of where he stood and what he wanted. For the purpose of justifying the position of my committee, which has been bludgeoned, maligned, and criticized, particularly myself, and I know, falsely, and make us right with the House, with the country, and with the public in general, I am going to read Judge Patterson's opening statement. He said, and I quote:

The bill that is before your committee today reflects the views of the men who were most responsible for the wartime development of atomic energy as to the most effective method of controlling and carrying forward development in this field within the United States. It embodies all the points on domestic policy recommended by the President in his message to the Congress last week

The manner in which this legislation was prepared will be of interest to you. In May of this year, 2 months before the test in New Mexico showed conclusively that the atomic bomb would work, Secretary Stimson, with the approval of the President, appointed an interim committee to recommend legislation that would insure that this discovery would be controlled and developed in the best interests of the people of this country.

The Secretary—

Meaning Secretary Stimson—

served as chairman of the committee, with George L. Harrison, former chairman of the Federal Reserve Bank of New York and present president of the New York Life Insurance Co., as his alternate. Mr. Harrison is here today. The other members of the committee were Secretary James F. Byrnes, then a private citizen; Ralph A. Bard, Under Secretary of the Navy; William L. Clayton, Assistant Secretary of State; Dr. Vannevar Bush, director of the Office of Scientific Research and Development and president of the Carnegie Institution of Washington; Dr. James B. Conant, chairman of the National Defense Research Committee and president of Harvard University; and Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, and Chief of the Office of Field Service in the Office of Scientific Research and Development.

General Groves was present in an advisory capacity at all meetings of the committee. The members were also aided by the advice and experience of eminent scientists who had rendered invaluable service in the atomic bomb project—Dr. J. R. Oppenheimer, Dr. E. O. Lawrence, Dr. Enrico Fermi, and Dr. Arthur H. Compton. Representative industrialists who had taken a prominent part in the project also assisted the committee in its work.

The drafting of the bill, in line with the principles and policies established by the committee, was done by Brig. Gen. Kenneth C. Royall and Mr. William L. Marbury.

Let me add at this point that General Royall spent 2 weeks in the committee room working with the committee in drafting, redrafting, doctoring, amending, and changing the bill. Then on the 8th day of last November we reported that bill to the House of Representatives. We thought we had done what the armed forces wanted, and I think yet that we did. The bill provided not only for the protection of the military secret of the atomic weapon as a military weapon but it provided also for adequate facilities for the dissemination of knowledge, information, scientific research, and development on atomic subjects through colleges, universities, schools, and industrial laboratories throughout the country. We did everything we could to make it a workable bill in order that we might do two things: Carry forward the policy of the War Department in that they were to have control of all our military secrets, and at the same time to make the most possible liberal provisions for the development and research program that they outlined to us. Now, that bill has been on the House Calendar, and is still on the House Calendar, but about 8 months later the Senate Atomic Bomb Committee reported a bill that is now pending before you and debated it briefly and sent it to this House, and it was referred to the House Military Affairs Committee, of which I am chairman.

Now, here is where the rub comes, if you want to call it that. I was charged by the press, by radio commentators all

over the country, with being guilty of obstructionist tactics in trying to defeat the report of Senate 1717.

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield.

Mr. SHORT. And I was charged with you, and it is a dirty lie—a dirty lie.

Mr. MAY. I will say in answer to my colleague's plain and emphatic statement, which is not susceptible of misunderstanding, and with which I agree heartily, that I made three different proposals to my committee that this bill be reported to this House without amendment under a wide open rule, so that every man could express his views in the form of amendments and debate. I did it because I felt that the House of Representatives would do what it wanted to do with this legislation in any event. That is what I think you will do. However, the committee pursued the other course. What is that course? That is the wise legislative procedure that has been adhered to by committees of Congress from its beginning.

That way is to take the bill up and read it for amendment. While that was going on I was besieged and beset by both sides of my committee, one side charging me with rushing it too much and the other side not necessarily backing me up with attendance; and I was handicapped and crippled, and it took me a long time to get it out of committee, not a long time but a couple of weeks that we worked upon it. I wanted to justify myself before this House of Representatives as not being an obstructionist.

The committee pursuing the usual and customary procedure of reading the bill section by section for amendment did adopt several amendments. The first amendment adopted is the bone of contention. The bill sets up a commission composed of five members to be appointed by the President and confirmed by the Senate, as usual. They were all possibly to be civilian members. The Committee in an effort to give the military establishment, the armed forces, if you please, the group of people to whom when war comes again, should it come, we would run like birds for shelter, for protection and defense, the committee decided that they ought to have something to say on that commission. While I think we wrote a defective amendment, I know what it intended. The amendment merely provides that at least one of these commissioners and not more than two shall be representatives of the armed forces. A civilian could of course be a representative of the armed forces. What the committee really intended to do was to say that he should be a member of the armed forces; but the phraseology is "representative of the armed forces" and that is where the issue will come in this House. When that question is settled I believe practically everything else except section 11 relating to patents will be easy going.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield.

Mr. DONDERO. Inasmuch as the atomic bomb, at least at the present time, is a war instrument why should not the armed forces have something to say about it?

Mr. MAY. If the gentlemen can answer his own question in any way but the affirmative he can do more than I. I believe they should have; but I want this House to have its own say about it, and whatever this House does, of course, binds me.

Mr. KOPPLEMANN. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield.

Mr. KOPPLEMANN. In view of the fact that the bill as it came from the other body contained a provision for a military advisory commission or committee, why the necessity for adding the provision which the gentleman admits is the controversial item in the bill?

Mr. MAY. You can give advice, but if you can not enforce it, the advice amounts to nothing.

Mr. KOPPLEMANN. But it does provide for enforcement.

Mr. MAY. Just a moment. It provides for a liaison committee with a director. The House Committee on Military Affairs went even further than I have already stated by providing that that director, or the member of that committee having to do with the military application of atomic energy, should be a representative of the armed forces; and that is the elaboration or extension of the provision that I first stated.

Mr. KOPPLEMANN. Mr. Chairman, will the gentleman yield further?

Mr. MAY. I yield; yes.

Mr. KOPPLEMANN. I understand that this liaison committee has a means of directive through the Secretary of the Navy and the Secretary of War applying to the President of the United States; so there is directive power in the hands of this liaison committee.

Mr. MAY. What I would say about this liaison committee is that it has no power to settle anything. It is supposed to consist of representatives of the Departments of War and Navy. The commission is required to advise and consult with the committee and keep it informed on all atomic energy matters which the committee deems to relate to military applications, and the committee can make recommendations to the commission. If the commission acts adversely to the interests of the War or Navy Departments, the liaison committee may refer the matter to the President.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield.

Mr. JOHNSON of California. I have read in the papers and heard it expressed on the radio that this committee wants the military people on this commission to dominate it. Was that ever expressed by anybody in our committee meetings, either executive or open?

Mr. MAY. It never was by any member of the committee and that was never the spirit or intent. All the committee had in mind was it wanted some representation of the armed forces on the commission and on the committee. If there is anyone here who can file a valid objection to that I would like to know what you are going to do when the next war occurs for relief and for protection.

Mr. GAVIN. If that idea was not conveyed to the committee it should have been conveyed to the committee,

Mr. MAY. I thank the gentleman.

Mr. Chairman, another one of the things that nettled me a little bit was the fact that a distinguished Member of another body went on the radio without ever asking me a word about it during the House committee hearings and without asking about the facts and called the attention of the American people to the fact they were about to be betrayed and destroyed by the action of the House Committee on Military Affairs, just as though if a bill is passed by one body, never presumed in either body to be absolutely correct, the body receiving it must unquestionably take it, swallow it, hook, line, and sinker even without bait.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from New Jersey.

Mr. THOMAS of New Jersey. Is it correct to say that the person who went on the radio, as the gentleman mentioned, was the person who introduced this particular bill?

Mr. MAY. Well, I think everybody heard the radio address. I have brought this bill here as the chairman of the committee as a result of the work of that committee, after cool consideration and judgment, and I forget everything that happened in the committee, all the differences and controversies we had, because we always have them. It is proper that we should have them. If everybody were of one mind there would be no issue to settle. When there are issues and they are debated, discussed, and finally concluded, I feel it is nothing more than the duty of the chairman of the committee to present the views of the committee to the House of Representatives and let the House work its will with the legislation.

Mr. Chairman, I want to appeal to the Members today, not necessarily to support my views, not necessarily to oppose my views, but to use their conscience and their judgment in the face of the responsibilities that fall upon their shoulders in these changing times. Under the law as it is today the atomic-bomb secret is protected by the War Department. Under the law as it may be changed I do not know what will happen. I hope for the best, but I believe my position on the subject is accurate and right.

Here is what it is: I think we ought to maintain and keep this military secret just as sacredly and carefully as we keep any other military secret we have, regardless of what it is, and this one in particular, until such time as diplomats, statesmen, and our representatives in negotiations with the other nations of the earth may arrive at an agreement, a treaty, compact, or whatever it is they arrive at, to eliminate the atomic bomb as a military weapon.

Mr. BARDEN. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from North Carolina.

Mr. BARDEN. As a matter of fact, officially we are still at war, is that not correct?

Mr. MAY. That is true.

Mr. CHURCH. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Illinois.

Mr. CHURCH. The gentleman stated that under the law today this secret is definitely in the military and we are protected. For how long?

Mr. MAY. Well, in my view and according to my understanding of the great War Department and our Army and its great leadership, I think it will be there just as long as they think it ought to be kept there, and it will be safe while they keep it.

Mr. ROBSION of Kentucky. Mr. Chairman, will the gentleman yield?

Mr. MAY. I am delighted to yield to my colleague from Kentucky.

Mr. ROBSION of Kentucky. Is there any provision in any law or act passed by parliament or congress of other nations, other than Great Britain or Canada, that yields any of their war secrets to us?

Mr. MAY. I do not know of any.

Mr. ROBSION of Kentucky. The gentleman's contention is that we ought to retain this great military secret of ours until we know what the world is going to do in settling these matters about the atomic bomb?

Mr. MAY. I think that the atomic bomb, as a weapon, ought to be outlawed, just exactly like we outlawed poison gas and other things that destroy the human race. But until that is done by a foolproof, bombproof arrangement, I am opposed to giving the secret away. However, I do favor the most extensive experimentation and research and discovery of all the civilian uses of atomic energy in every field and for every purpose for which we can better the human race. That is my position.

Mr. WHITE. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Idaho.

Mr. WHITE. What is the term of office of those as defined in section 2?

Mr. MAY. Five members will serve 5 years each, I believe, in the Senate bill. In the May-Johnson bill we had nine members, which I thought was four too many. It was stepped up until it became nine.

Mr. LANHAM. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Texas.

Mr. LANHAM. By the terms of the bill itself this is a matter which is going to be capable of very frequent changes because of new inventions. Does not the gentleman think that the whole act should be limited to a period of, say, 3 years, and then new legislation, if needed, could be enacted to meet the changed conditions?

Mr. MAY. There are provisions in both bills and both reports from the Senate and the House calling attention to the fact that legislative changes will, of necessity, have to be made from time to time. No longer than last Sunday one of the principal officers of the Navy called me and asked permission to see me at my home at 3 o'clock in the afternoon, which he did, and presented me with an amendment which would limit the operation of this act to 3 years. He had to leave for the Bikini experiment or he would probably have been here yet.

Mr. WHITE. Mr. Chairman, if the gentleman will yield further, the gentleman said 5 years. What interpretation can be placed on subparagraph (A) on page 4:

The terms of office of the members first taking office after the expiration of 2 years from the date of enactment of this act shall expire, as designated by the President at the time of appointment, one at the end of 3 years, one at the end of 4 years, one at the end of 5 years, one at the end of 6 years, and one at the end of 7 years, after the date of enactment of this act.

Mr. MAY. He would serve 5 years before being reappointed at the end of 5 years. That is a step-up provision.

Mr. JENKINS. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Ohio.

Mr. JENKINS. The gentleman, in giving the language of the bill with reference to who should participate on the part of the military, indicated that it was not clearly defined that the person to represent the military should be a military man; in other words, an Army man. Would there be any objection to correcting that language so that it would be clear that somebody on this Commission would be a military man? Personally, I have great confidence in the Army and the Navy, and they have kept our military and naval secrets without any condemnation, anyhow, any real condemnation, and why would it not be right to clarify that so that we would always have on that board a military man and a naval man or somebody that would be in that category without any question?

Mr. MAY. My views are that my committee really intended that the term "representative" should mean a military man.

In view of that, I would have no objection to its being changed to that extent. Of course, I am supporting the bill as reported by my committee.

Mr. REED of New York. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from New York.

Mr. REED of New York. I have seen some correspondence raising the same question in regard to patents. Would the gentleman mind clarifying that?

Mr. MAY. I would not be able to clarify that at this time. That is section 11 of the bill. It is so far-reaching and wide in its scope that the American Bar Association and many of the business interests of the country have objected to it. The naval officer who came to see me on Sunday presented me with a new version of it, which I understand will be offered as an amendment by the gentleman from Texas who is chairman of the House Committee on Patents. If it is, we will then have a chance to debate it and understand it.

Mr. KNUTSON. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Minnesota.

Mr. KNUTSON. I am in thorough sympathy with the gentleman's contention that the military should be represented on this Commission. I wonder if we would be as unfortunate with the civilian board as Canada has been. The leaks that took place in Canada all came

from civilians. I fail to find the name of a single officer of the armed forces who in any way betrayed his trust.

Mr. MAY. We put really heavy penalties in this legislation against any man who betrays his trust or fails to do his duty, and I am sure the average military man, subject always to court martial, will be true.

Mr. KNUTSON. What do you do, shoot him?

Mr. MAY. I think the fine goes as high as \$20,000, and 5 years in jail.

Mr. SMITH of Ohio. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Ohio.

Mr. SMITH of Ohio. As I understand, the secret of the atomic bomb is perfectly safe at the present time. Is that correct?

Mr. MAY. I would hate to think it is not. I am sure it is.

Mr. SMITH of Ohio. If that be true, just what is the need for this legislation at the present time? The war has not been declared over. That is a vast subject. I think you could debate it for a whole year and not be very much further along than you are right this moment. It seems to me this matter could wait a while. I do not see any need here under the circumstances for stirring up the matter.

Mr. MAY. It will not hurt to have the legislation on the statute books, and I think it ought to be enacted. I think the bill ought to be passed, but I doubt very much that it ought to be made permanent with the vast powers the Commission will have and the widespread facilities it will have available. This bill turns over to this Commission and takes away from the War and Navy Departments \$2,250,000,000 worth of property that has been utilized in the development of the bomb and the other things in connection with it.

Mr. BARDEN. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from North Carolina.

Mr. BARDEN. There are two things I want to mention. One is the question of penalties for turning traitor on this country and giving away the bomb secret. Instead of its being a fine of \$20,000, the penalty should be death.

Mr. KNUTSON. That is correct.

Mr. BARDEN. That should be definitely known to those who handle these things.

Mr. MAY. I quite agree with the gentleman, that such an act would be treason in its vilest form and ought to receive a death penalty.

Mr. BARDEN. May I ask the gentleman if the atomic bomb secrets are not now being kept just as are the secrets concerning all the rest of our military and secret weapons at this time?

Mr. MAY. I am sure they are, because if any had leaked out it would have been found out, with the publicity facilities we have in this country, because I think they are adequate, from what has been happening around here the last 10 days.

Mr. TABER. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from New York.

Mr. TABER. Is it true that if this bill is passed and if this Commission is appointed, the general understanding is that David Lilienthal, the head of TVA, is to be the chairman of this Commission? If so, does the gentleman feel that it is in the interest of the United States that we should cut such a caper?

Mr. MAY. I think my colleague understands my position and views as to that gentleman. I prefer not to reexpress them here. I would not want to see him chairman of that Commission.

Mr. REED of New York. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield.

Mr. REED of New York. If this secret is perfectly safe at the present time, would you not think that if it remains where it is over a period of time it would still be as safe there as it would anywhere else?

Mr. MAY. I have no doubt in the world that the Army of the United States will never reach the low state of giving away their military secrets about anything, and I believe that any man who would give such secrets away would receive speedy, just, and severe punishment.

Mr. REED of New York. What I am getting at is that the secret is known by a rather limited number of pretty high-grade military men; is that not true?

Mr. MAY. That is correct, together with a few top scientists.

Mr. REED of New York. If you want to keep a secret, military or otherwise, are you not more apt to keep that secret when only a few people know it than you are with many knowing it?

Mr. MAY. That is correct, and that is illustrated by the old saying that if you want to keep a secret, never tell it to a woman.

Mr. REED of New York. The point I want to bring out is that by this legislation more people would know it.

Mr. MAY. Correct.

Mr. TABER. I understand there is a provision here for the setting up of an enormous propaganda organization. Is it the understanding that Elmer Davis is going to have charge of that? If so, would the gentleman warm up to that kind of proposition?

Mr. MAY. The only thing I know about is what I hear in the hearings and what I read in the newspapers, and I do not believe that part of it. I know nothing about who are to be the members, not having been consulted, and I do not anticipate that I will be consulted.

Mr. SMITH of Ohio. The thing that worries me about this whole question is the talk we hear and the things we read in the newspapers about giving this secret away. I have never been able to understand why anybody should want to give this secret away. It is safe where it is. Why turn it over to this Commission that will be set up under this bill and run the risk of losing it? That is the thing that worries me.

Mr. MAY. I think that is a repetition of what we have been discussing here for the last 5 minutes. I have stated my position on that question and I would want my colleagues to take their position as to where they want to stand.

Mr. DONDERO. The gentleman made some reference about keeping the secrets of the Government in a secure place. Do you not think the secrets of this atomic bomb should be kept much more carefully than our confidential and highly secret files which were stolen out of the State Department and Naval Intelligence during wartime when they took 151 files out of the Department and found them in a Communist office up in New York?

Mr. MAY. I agree with my colleague as to the necessity for keeping absolutely secret the mechanical construction of the atomic bomb and that that will be the greatest move for peace that the world has ever known.

Mr. SHORT. Mr. Chairman, I yield myself 5 minutes.

Mr. Chairman, there is an old adage, "Fools rush in where angels fear to tread." I certainly feel like a fool today, because I frankly confess my abysmal ignorance of the pending legislation. And the more I listen to these scientists, chemists, physicists, and mathematicians the more confused I become.

I started out really in favor of this bill in spite of a lousy, dirty, stinking editorial charging me with trying to obstruct it. I voted for the United Nations Organization. I think it is the only hope in this world. I want to implement it. I think we must do that.

Science is knowledge, and Francis Bacon once said, "Knowledge is power." The trouble with us today is that we have more power than we know how to use. It is misguided and misdirected. Dynamite can construct highways or it can blow men's brains into the mud. Unless we learn from human problems, all of our science, knowledge, and highly boasted twentieth-century civilization is going to destroy us. Let us wake up.

The purposes and aims of this bill, no doubt, are laudable and praiseworthy. I would like to vote for some measure to help us out of our dilemma, but it contains certain provisions that are very dangerous. I would like to vote for a measure that is not unconstitutional or threatens to destroy our Nation.

Nothing was said in the hearings or so far on this floor about the cost of this thing.

Do you know what we are going to do? We are going to set up an Atomic Energy Commission and give it the power of life and death over private industry in this country. I do not like such a blanket, broad delegation of powers run riot—taking it out of the hands of the people of our Nation. I have the highest regard, of course, and the greatest respect for our professors, our economists, and our teachers. I was one once. Thank God, I stopped before I became a member of the "brain trust."

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. SHORT. Yes.

Mr. VOORHIS of California. I would like to ask the gentleman, first of all, speaking as a person who is not ashamed of the fact that he has been a school teacher, whether he believes that the provision in the bill which assures to every single American business that may arise in the future, an equal opportunity

to the benefits of atomic energy, is destructive of private enterprise.

Mr. SHORT. No, but—

Mr. VOORHIS of California. That is what the bill does.

Mr. SHORT. Well, that is state socialism. I ought to be a Communist. I have nothing, and want to share it with everybody. All that is horsey, horsey stuff. I cannot use stronger language in the House.

Now, what does this bill do? It sets up a commission of five members, the chairman drawing \$17,500 a year, and the others \$15,000. I insisted upon that provision, because no doubt they could earn much more in private industry. But they have got a general manager who is going to get \$15,000 a year. They have a division of research, a division of production, a division of engineering, a division of military application. They each get \$14,000 a year. There is no end to it! The sky is the limit. Then, of course, they have got a general advisory committee. They get \$50 a day, for sitting wherever they want to sit and hearing whatever they want to hear, putting a halter on you and tightening the rope around your neck. You do not want this?

The point is, we are elected by the people and we are responsible to them every 2 years. They can hire and fire us this November. You cannot hire and fire any bureaucrat down here in the OPA, the CPA, or any other bureau. They are "appointed."

The CHAIRMAN. The time of the gentleman from Missouri has expired.

Mr. SHORT. Mr. Chairman, I will yield myself five additional minutes.

They can hire and fire us. You cannot hire and fire them. The only way you can get rid of them is to get rid of the guy who appoints them. I think the American people will look after that little task a little later on. Destroy the New Deal—a rotten steal.

Now, the other day we voted \$4,400,000,000 to Great Britain. It is not \$3,750,000,000. There was an additional \$650,000,000 to Great Britain. Why did we vote \$650,000,000? To cancel over \$25,000,000,000 worth of lend-lease, and before they can pay us the \$25,000,000,000 in lend-lease we had to loan them \$650,000,000 to pay us with. What suckers we are. We have given away everything except the dome of this Capitol. It is sickening to me. I faint when they laugh. I should not perhaps bring this in the debate, but I do not care. It is in the pattern and we cannot ignore it. The only thing I can say—and I do pray—is God help us.

You propose now to hand your enemy a pistol with which to shoot you. Oh! You are smart people, are you not? We will get it because we asked it.

The United States and our people have paid, the taxpayers of this Nation have paid, over \$2,000,000,000 to develop this atomic bomb. You talk about mutual transactions, intercourse, trade; we have got everything to give, we have got nothing to receive. Go on being Santa Claus, but help our people first.

Now, I want to say I do not know how I am going to vote on this bill. I never was so confused and befuddled in all my

life. I mean it. Do not laugh—you are, too. We spent long days of study and we spent sleepless nights upon it.

I have always thought that science, knowledge, was international in its scope. You cannot hamstring the mind of man; you cannot corner his spirit by putting up artificial barriers. This atomic bomb was the product of many minds from many countries. I do not think there are so many secrets about it if you want to know the truth.

Mr. DURHAM. Mr. Chairman, will the gentleman yield?

Mr. SHORT. I yield.

Mr. DURHAM. Is not that one of the reasons why it cannot be kept a secret?

Mr. SHORT. I think the gentleman made a point; and I want to argue that science and knowledge are universal, and no people, no nation has a monopoly on the discovery of truth. This is the product of many minds from many lands. The gentleman knows it, and perhaps certain supposed enemies of ours—I do not think we have any—we should not have any, although we have not a friend left on the face of the earth—our enemies perhaps know as much about this as we do, or even more; but I do not think they have the methods of manufacture, the know-how production, as far as the integral parts are concerned. Uranium, plutonium, and the nuclear fission theory have been described to the committee. I heard words used before our committee that you cannot find in Webster's Dictionary. I think your ignorance is about as profound as mine. I admit it.

I know that this thing called science and power can save or destroy mankind.

I do not know how I am going to vote, but I am going to listen to the very charming and persuasive and delightful gentlewoman from Connecticut. After all, you have your own war departments, we all have our private war departments. They give orders and we usually obey. I have listened to the testimony in the hearings but I am going to listen to this debate today. Every seat in this Chamber should be occupied today. The future not only of this Nation but of mankind hangs in the balance.

The CHAIRMAN. The time of the gentleman from Missouri has again expired.

(Mr. SHORT asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I yield 12 minutes to the gentleman from North Carolina [Mr. DURHAM].

Mr. DURHAM. Mr. Chairman, I am always glad to follow the gentleman from Missouri and to listen to him in debate. The chairman of our committee has outlined to you the history of this legislation. Our committee was the first one to take it up in the Congress and the first to consider it.

We devoted much time and study to atomic energy. We had extensive hearings and during the hearings we listened to practically all the scientists connected with this work. We also listened to the War Department and other officials in an effort to seek advice and to seek some way to control this weapon. Hearings began some 30 or 40 days after the first one was dropped.

Mr. Chairman, I would like to make some remarks on the subject of the atomic energy bill, S. 1717, which is before us.

We saw, nearly a year ago, the victorious conclusion of a war whose end was greatly quickened by the use of atomic bombs. To produce those bombs, a great array of scientific talent was concentrated on the problem for several years and about \$2,000,000,000 of the public funds were spent. Now we are confronted with establishing through legislation a public policy with regard to the further development and control of atomic energy to the end of serving the common good of our people in peace and of assuring the common defense.

While the first use of atomic energy was a military one, our scientists have assured us that important peacetime uses of atomic energy and of the by-products of atomic power plants are already known and that others will surely be developed as research goes on in this field. The Nagasaki bomb was made of a brand new chemical element, plutonium, manufactured in the uranium pile at Hanford. We are told that for every pound of plutonium produced there were about 10,000,000 kilowatt-hours of heat energy released by nuclear fission and carried away by the Columbia River. Now work is proceeding on a pilot plant for the utilization of such energy. It is obvious that, because a power pile produces plutonium as well as power, controls are necessary in the public interest.

In the bill that came to us from the Senate after months of hearings, with the approval of both parties and of the President, it seems to me that adequate protection of the interests of the military was provided for in the Senate bill. The top policy making body, whose task is both to provide controls and to promote the further development of atomic energy, is to be an Atomic Energy Commission of five full-time civilian members, responsible to the President. This Commission is to be advised on all matters relating to military applications of atomic energy by a military liaison committee. A proposal to give the Army and Navy a greater degree of direct control was rejected by the Senate Special Committee on Atomic Energy after a great expression of public opinion in favor of civilian control and after the heads of our War and Navy Departments had testified that the necessities of the military, in order to discharge their responsibility for the national security, were adequately provided for.

My distinguished colleagues on the Military Affairs Committee have thought it wise to make several amendments whose aim is to increase the amount of direct military control in atomic energy development. I refer particularly to (1) the amendment requiring one and permitting two members of the commission to be military men on active duty; (2) the amendment requiring the Director of the Division of Military Applications to be a military man on active duty; and (3) the amendment permitting the armed forces, with the approval of the President, to maintain their own facili-

ties and manufacture atomic weapons, independently.

I wish to state now that I do not believe that the three amendments just mentioned constitute desirable changes in the bill, and I intend to vote for their removal.

Referring to the first of these amendments, it must be evident that membership on the commission is a full-time job and that no military man could be on the commission and have, at the same time, any other military responsibility. However, he could not have an undivided loyalty to the commission nor could he exercise independent judgment since, as an officer on active duty, he would be responsible to his superiors in the Military Establishment. It is clear that the purpose of this amendment is to increase the amount of direct military control in the top policy-making body which our military leaders tell us they do not require and which the American people do not want.

In connection with all of these amendments, we should recognize the necessity of maintaining our military strength, but we should also recognize the fact that our Government is participating in discussions about international cooperation. We should take care not to prejudice the chances of success in those discussions.

Without the discovery of new ideas and inventions there would have been no discovery of a new world. Thus we see discoveries and inventions of mechanism become the dynamic controls in our modern economic system and make it necessary for political and social adjustments in the structure of the modern world.

Speculation gave us investigation in the field of atomic energy. Experimentation and research by our scientists has given us this problem. This discovery of nuclear fission has caused man to change his conception of the earth and universe.

This is a domestic bill we are dealing with today, and our problem is to work this revolutionary discovery into a self-balancing, self-regulating economic system subject to the natural laws of supply and demand so that it will not trammel or destroy our industrial liberty or our energy that has created our private business enterprise system. After many trials and errors this system has proven to be the best system on earth.

We here in America must take the lead. As the home of the atomic bomb America has a great moral responsibility. And let us pray, we in making our choice will not fail mankind in this tragic hour but will shoulder our responsibility and opportunity and give fresh hope to the stricken world.

Mr. KOPPLEMANN. Mr. Chairman, will the gentleman yield?

Mr. DURHAM. I yield to the gentleman from Connecticut.

Mr. KOPPLEMANN. In the information presented to the gentleman's committee, is it true the Army and the Navy both stated that the amendment with reference to military representatives on the Commission is not necessary?

Mr. DURHAM. I am not sure whether they made that statement or not before any committee. Our hearings were held

long before the Atomic Committee was set up.

Mr. THOMASON. Mr. Chairman, will the gentleman yield?

Mr. DURHAM. I yield to the gentleman from Texas.

Mr. THOMASON. It is safe to say that the record discloses that the Secretary of War in person and the Under Secretary of the Navy both stated that they favor the bill as it passed the Senate.

Mr. DURHAM. That is correct.

Mr. KOPPLEMANN. That is the question I wanted answered.

Mr. DURHAM. The gentleman asked me if they appeared before our committee.

Mr. SHORT. Of course, they know as much about the bill as we do.

Mr. DURHAM. I think so, yes.

Mr. VORYS of Ohio. Mr. Chairman, will the gentleman yield?

Mr. DURHAM. I yield to the gentleman from Ohio.

Mr. VORYS of Ohio. Is it not true that the hearings disclose that the reason the Secretary of War said he wanted the Senate bill acted on promptly was his anxiety to get some sort of legislation promptly, and he had no objection to the provision for military representation on the Commission?

Mr. DURHAM. That is correct. Of course, the President sent us his message, as the chairman stated to you, last October, urging us to enact this legislation immediately. Also at that time the War Department appeared before us, General Groves himself appeared before us, and asked that we expedite this legislation. Now here we are here 9 months later.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. DURHAM. I yield to the gentleman from California.

Mr. JOHNSON of California. In those hearings they advocated a bill that provided for the very representation the gentleman from Ohio mentioned.

Mr. DURHAM. That is correct.

Mr. JOHNSON of California. The other day they repeated their confirmation of that legislation.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. DURHAM. I yield to the gentleman from Connecticut.

Mrs. LUCE. I have here the statement of Mr. John Kenney, Assistant Secretary of the Navy, which he made before our committee on June 12. He says, and I quote from his own testimony:

The bill in its present form satisfactorily covers the Navy's primary interests in having a voice in the affairs of the Atomic Energy Commission and in being able to conduct its own research and development programs without undue interference from the Commission.

Mr. DURHAM. That is correct.

Mr. SHORT. Mr. Chairman, I yield 15 minutes to the gentleman from Indiana [Mr. HARNESS].

Mr. Chairman, I make the point of order that a quorum is not present.

The CHAIRMAN. The Chair will count. [After counting.] One hundred and four Members are present, a quorum.

Mr. SHORT. Mr. Chairman, will the gentleman yield for a brief question?

Mr. HARNESS of Indiana. I yield.

Mr. SHORT. Does not the gentleman feel that until the war is officially declared ended, until the peace treaties are written, we certainly should hold onto the secret weapon we now have?

Mr. HARNESS of Indiana. I certainly do. I think there is no necessity for rushing this legislation through. I believe the security of the Nation will be better protected under the present set-up than it would be under this bill.

Mr. Chairman, this measure is a threat to free government. It grants more complete and sweeping power and authority to an executive agency than any other proposal ever considered in the United States Congress. The bill literally places in the hands of a five-man commission complete and absolute authority over American industry and the lives of our entire population. It is shocking and frightening that this proposal could advance as rapidly and get as far in this Congress. I implore the House to reject the bill and send it back to the committee.

Let me call your attention to section 11 (c) of the act, which provides for compulsory licensing of patents. That is to say, instead of giving the inventor an exclusive right in his inventions, in other words, the right to exclude others from the manufacture, use, or sale of an invention, a patentee's invention shall be made subject to the right of others to make, use, and sell the invention upon the payment to the patentee of a reasonable compensation.

Before considering the advantages and disadvantages of compulsory licensing, it is well to point out three distinct accomplishments of the present system of granting exclusive rights to patent owners.

First. By granting to the inventor an exclusive right for a limited time, an incentive is given to him to invent and disclose, not conceal, his invention so that after such period of limited time the invention enters the public domain.

Second. A very important advantage is the encouragement of risk capital to undertake the exploitation of an invention, frequently resulting in new industries arising or old industries expanding.

Third. By granting exclusive rights for inventions there inevitably arises competition in developing inventions. That is to say, inventors get to work inventing a substitute for, or a new way of accomplishing, that which is already patented. Many important inventions have resulted from such competition.

Each of these three advantages will either be completely lost or seriously impaired if a system of compulsory licensing is adopted.

Compulsory licensing of patents has long been a controversial subject. Bills have been introduced at various times, especially since 1912, directed toward encouraging this feature in our patent system despite the fact that it is the negation of the exclusive right provided for in the Constitution. Those bills which originally included compulsory licensing of all patents were promptly amended to include only future patents, since it was realized that compulsory licensing of patents already issued was

depriving the patent owner of a property right without due process of law.

Mr. LANHAM. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield.

Mr. LANHAM. May I say to the gentleman that the Committee on Patents of the House of Representatives has held steadfastly to the opinion that he has expressed and has consistently refused to endorse or report anything that smacks of compulsory licensing of patents which goes to the very fundamental basis of our progress.

Mr. HARNESS of Indiana. I thank the gentleman for that comment, and would add that the Congress as a whole has steadfastly adhered to that program, because it is one of the fundamentals of a free-enterprise system under a free government.

Many and extensive hearings have been held by congressional committees to determine the advisability of legislation in one form or another for compulsory licensing. Such hearings were held in 1912 and 1914 on the Oldfield bills, in 1922 on the Stanley bills, and in 1938 on the McFarland bill. At all of these hearings, patentees, inventors, and manufacturers almost unanimously opposed compulsory licensing mainly on the grounds that it would discourage invention and that it would favor large corporations over smaller corporations and over individuals.

Mr. SHORT. Mr. Chairman, will the gentleman yield at that point?

Mr. HARNESS of Indiana. I yield.

Mr. SHORT. Here is a release that all Members of the House should listen to:

The McMahon atomic energy bill (S. 1717) reflects the blind arrogance of bureaucracy gone mad," declared John W. Anderson, spokesman for small business, today. "The bill would drive American inventive diligence underground. It would create a vast black market in dangerous atomic inventions. Secret agents of foreign governments would find United States inventors cringing from the harsh treatment threatened by their own government. Fear and resentment would lead to secret deals in which alien agents would get the inventions for black cash.

Mr. HARNESS of Indiana. Mr. Chairman, this bill if enacted into law, will surrender the sovereignty of the people of this Nation to a five-man Commission appointed by the Chief Executive.

Mr. VORYS of Ohio. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield.

Mr. VORYS of Ohio. I read the bill last night and I could not find any place where there were any criminal penalties that could be invoked against the Commission. While the Commission was given the power to make regulations, the violation of which would be a crime punishable by fine and imprisonment, I found no criminal penalties that could be invoked against the Commission for disclosures or for any other reason. How about that? What does the criminal provision provide as far as members of the Commission itself are concerned?

Mr. HARNESS of Indiana. I think this bill would remove all security provisions that we now have against disclosure of secrets that are in the national interest.

There is no provision as far as I can remember in this bill that in any way prevents this Commission from disclosing any of the secrets they might get when the Manhattan Project is turned over to them. Moreover, bear this in mind: This Commission is given the authority, believe it or not, of reciprocating information with any foreign nation, and the Congress has no authority to stop it.

Mr. SHORT. Would the very able lawyer from Indiana, one of the finest Members of this House, tell us what the other nations have to give us in reciprocity.

Mr. HARNESS of Indiana. Even trying to be generous and fair in reply to that question, I believe the rest of the world has comparatively little to offer now, and that it is hardly likely to have comparatively more anytime in the next several years.

Mr. SHORT. It is all give and no take?

Mr. HARNESS of Indiana. That is right. We are habitually on the giving end. Judging from our record, this proposal would keep us there. There is no basis here for dealing, or reciprocating, quid pro quo.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield.

Mr. ELSTON. As far as this bill is concerned, the Commissioners would have the power and authority to turn over the secrets of atomic energy for industrial purposes, and in return get nothing but good will?

Mr. HARNESS of Indiana. That is right.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield.

Mr. DONDERO. The gentleman has come to the defense of the patent laws of this Nation and the competitive system under which we operate; and I commend him for it. Does he not think, perhaps, Emerson had that in mind when he wrote that when a man builds a better mousetrap than his neighbor the world will make a beaten path to his door?

Mr. HARNESS of Indiana. Absolutely.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. Let me proceed with my prepared statement; then I shall be pleased to yield if I have the time.

Witnesses testified that many worthwhile inventions require years of research and experimentation before an invention is attained; and that it ordinarily takes many years to perfect an invention even after the patent is granted. Often such research results in failure before an invention to accomplish the desired purpose is made. Therefore, for a corporation or an individual to obtain by compulsion a license from the patentee or the patentee's official backer would manifestly be unfair, since the person seeking the license does not share in the expense of unsuccessful research and development. Those willing to risk capital in the development of new enterprise would hesitate to do so if, when he is successful, others could come in and share his success by obtaining a license against the will of the patent owner. On

the other hand, if the patentee is unsuccessful, he would have to bear his own loss. In short, the testimony of those familiar with the subject has been almost unanimous to the effect that such legislation would discourage invention and new enterprise. Not only would it discourage invention because of lack of incentive such as would be given by an exclusive license, but compulsory licensing would render it unnecessary to compete in making inventions since in the main those wishing to go into a new enterprise would be content to force a license for inventions already made rather than make their own inventions; that is, to create a new and different way of accomplishing the same result. Why take the risk with possible failure when by paying a reasonable royalty he can share the fruits of others' efforts?

The testimony in the above-mentioned hearings has fully brought out the fact that compulsory licensing would lessen the incentive to invent, would discourage the introduction of new enterprises, and would, to a large extent, remove competition in invention. It would, in fact, socialize our patent system.

The question of compulsory licensing, like the provision in the bill for taking away from present patent owners all rights in the field of research and development, involves a highly important constitutional question. Mind you, I have been discussing only one section of this bill. There are many other sections that infringe individual constitutional rights.

Where a serious question of constitutionality is involved, as it apparently is in this issue, there is never any valid excuse for hasty and ill-considered action. But in this question there is utterly no reason whatever for us to act in haste as though we were confronted by a critical emergency, for technically at least we continue to be in a state of war.

Under the circumstances, the President still holds in his hands extraordinary war powers. These proved adequate to provide security in the field of atomic energy during the period of actual hostilities. They should certainly, therefore, be adequate for the temporary period until peace is formally declared, if the President will exercise them as wisely and firmly as we have the right to expect that he will.

I know it is argued that our failure to take definitive action leaves the rest of the world doubtful and suspicious of America's intentions and that it leaves the field of atomic research and development under military dominance.

Neither argument is valid. In the first place, we have time and time again gone far more than half way to prove to the world that no decent nation, large or small, has reason to doubt or fear us. The Baruch proposal for international controls, standing alone, is sufficient evidence of that. If other nations are not disposed to accept it as such, it is hardly clear how this proposed action could win their confidence and trust.

As for military dominance in the field, the simple fact remains that the President is, in fact, Commander in Chief, and as such is directly superior to this military influence which some people profess to fear. If the President is not disposed

to prevent undue military influence in this field now, would you expect him to appoint civilian members to this commission who would be less favorably inclined toward the military viewpoint?

The present controls are purely temporary in nature, and can be quickly terminated or altered. This proposal would establish a permanent system of controls far less subject to change or remedy. A hasty error at this point could easily result in permanent damage.

It cannot be too strongly emphasized that these controls we are asked to adopt are sweeping and all-inclusive in character. Even if any doubts as to their constitutionality are resolved, they are still, in my opinion, too broad to impose upon a free economy without serious results.

I am just as anxious as anyone to protect atomic research and development from military domination. I am deeply concerned that this new force be turned as completely as possible from destructive purposes, and as fully as possible to creative and constructive ends.

But in seeking that end, I certainly do not want to see this new science fall under the blight of bureaucracy, which might be the surest way to defeat the very ends the proposal professes to seek.

I urge that this measure, therefore, be returned to the responsible committees with specific instructions for further and more careful study than the whole question has so far received.

The CHAIRMAN. The time of the gentleman from Indiana has expired.

Mr. SHORT. Mr. Chairman, I yield the gentleman two additional minutes.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield to the gentleman from California.

Mr. VOORHIS of California. I agree heartily with what the gentleman said about the Baruch proposal to the United Nations Commission on Atomic Energy. I believe that proposition ought to prove to any nation the sincerity of the United States in seeking peace, but I think it important that our action correspond to that proposal. The gentleman will agree, I hope, those people who are responsible for the preparation of the Baruch proposition were in favor of this bill as written by the Senate?

Mr. HARNESS of Indiana. That would not influence my feeling on this bill at all. I am frightened at this proposal, I am fearful for my country and our free republican system of government. I do not want to see any commission set up with such sweeping powers over the American people's lives.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield to the gentleman from Kentucky.

Mr. MAY. Does the gentleman agree with me that under the provisions of this bill which authorize the appointment of employees, servants, and agents by the commission, they could probably build as large a bureau as the Department of Agriculture if they wanted to?

Mr. HARNESS of Indiana. The Department of Agriculture would be insignificant compared with what they could do under this authority. There is one section in this bill which would give

the commission the authority to set up one of the greatest propaganda bureaus we have ever heard of in this Nation. Why, we voted down funds for OWI, but this would be a super OWI with authority to establish libraries, publish communications, magazines, newspapers, and other kinds of propaganda. It simply is too sweeping and too much power for a commission to have.

The CHAIRMAN. The time of the gentleman from Indiana has again expired.

(Mr. HARNESS of Indiana asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I yield 10 minutes to the gentleman from Illinois [Mr. PRICE].

Mr. PRICE of Illinois. Mr. Chairman, it is claimed by those proposing the amendment requiring the President to appoint a representative of the military to the Commission for the Control of Atomic Energy and the amendment permitting the President to appoint two active or retired officers of the Army or Navy to the Commission, that the amendments are necessary in order to give the military adequate representation in atomic energy matters.

Now, everyone will agree that the military should have representation on atomic energy matters.

Everyone will agree that the military should have representation adequate for our national defense.

If S. 1717 as passed unanimously by the Senate does not already provide that adequate representation, then, of course, it should be incorporated into the act.

The only question, then, is: Does S. 1717 provide adequate military representation?

The bill establishes a special military liaison committee of unlimited number to be appointed by the Secretaries of War and Navy. The Commission must advise and consult with this committee on military applications of atomic energy, specifically including all matters affecting bombs, the control of information relating to bombs, and the allocation of materials for military research. Should this committee be dissatisfied with the Commission's action, proposed action, or failure to act, it may refer the matter to the Secretaries of War and Navy, who may, if either feels the matter is of sufficient importance, refer the question to the President, whose decision will be final.

The act also sets up a military applications division which will specifically carry on military research as directed by the President. This will in no way interfere with military research by the Army.

It is provided in the act that the quantities of fissionable material and bombs to be produced, and the disposition of these bombs are to be determined by the President who, presumably, will act on the recommendations of his military advisers in the War and Navy Departments.

Do these provisions give the military adequate representation in the control of atomic energy?

Who is in the best position to know?

The Commander in Chief of our armed forces?

The President has said:

A Commission established by the Congress for the control of atomic energy should be composed exclusively of civilians.

Only the other day, while this act was before our Military Affairs Committee, the President reaffirmed his support of S. 1717 and said that "it suited him exactly."

The Secretary of War?

Secretary of War Patterson testifying before the House Military Affairs Committee on this act was asked:

Would the War Department be opposed to any amendment to this bill authorizing one or possibly two members of the Commission to be representatives of the armed forces?

He replied, and I quote:

We did not advocate and we do not advocate it. We believe that the national defense aspects—and they are important on atomic energy—are adequately cared for by that paragraph in section 2, providing for the military liaison committee.

The Secretary of the Navy?

Secretary of the Navy Forrestal wrote to the chairman of the Senate Special Committee on Atomic Energy:

Please accept my congratulations on the passage Saturday of your bill for the control and development of atomic energy. It is well drawn and accomplishes what I know you were after from the beginning—a proper balance between civilian and military control. This is not merely my own view but that of the professional people in the naval service.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. PRICE of Illinois. I yield to the gentleman from New Jersey.

Mr. THOMAS of New Jersey. Can the gentleman tell the Committee the date of Secretary Forrestal's letter?

Mr. PRICE of Illinois. It was the day after the passage of the bill in the Senate. I do not remember the exact date.

The Assistant Secretary of the Navy?

W. John Kenney, in testifying before the House Military Affairs Committee on this bill, said:

In the opinion of the Navy Department, this and the other provisions of section 2 (c) constitute an effective mechanism whereby the armed services will be informed of, and will participate in, the work of the Atomic Energy Commission having to do with military applications in the atomic energy field. Therefore, the Navy Department strongly supports those provisions of the bill and urges that they be reaffirmed by the committee and by the House of Representatives.

The Chief of Staff?

General Eisenhower has approved this act as it unanimously passed the Senate.

The Chief of Naval Operations?

Admiral Nimitz has approved this act as it unanimously passed the Senate.

I submit, gentlemen, that if the President of the United States, the Secretary of War, the Secretary of the Navy, the Assistant Secretary of the Navy, the Chief of Staff, and the Chief of Naval Operations—all men responsible for the military defense of the country—if all these military officials are satisfied that S. 1717 provides the military with adequate representation in the matter of atomic energy, who is there among us who will insist on being more patriotic

than the defenders of our country?

Who is there among us who would wish to be more militaristic than the military?

There are those who have said, and who will say again: "If this is the legislation which the War Department really wants, why did Secretary of War Patterson first endorse the May-Johnson bill? Can it be he now asks for S. 1717 because he is a good soldier and must follow the lead of his Commander in Chief?"

The best answer is given by Secretary Patterson himself in his testimony before the House Military Affairs Committee. He told the committee:

This bill, S. 1717, was drafted after months and months of work by an able committee in the Senate. Naturally enough, with all of that study devoted to it, and with some 6 months more of development in the background for this bill, it has a number of detailed provisions of a valuable character, I believe, that neither the Stimson committee in the War Department nor this House committee had time to consider. * * * This bill goes further in dealing with the national defense aspects of atomic energy than the earlier bill did. There was nothing in the May-Johnson bill creating a military liaison committee, no specific provision in it at all as to how the Army or the Navy would keep posted on what was going on in atomic energy. This bill does, and it is better in that feature.

It seems perfectly obvious that the only reason the War Department and the Navy Department ask you to pass S. 1717, without any crippling amendments is because they are convinced it is in the interest of national defense to do so. I want a chance to support the Senate version because I believe it is a step toward control of atomic energy. I want to see Congress do something to promote international control of atomic energy. I hope we will avoid giving encouragement to international rivalry for atomic power.

Mr. SHORT. Mr. Chairman, I yield 15 minutes to the gentleman from New Jersey [Mr. THOMAS].

(Mr. THOMAS of New Jersey asked and was given permission to revise and extend his remarks.)

Mr. THOMAS of New Jersey. Mr. Chairman, much has been said here today about the history of this particular bill. The last speaker mentioned something about the various Secretaries of War and the Navy and admirals and generals who are supporting this legislation. I want to say that 8 months ago Secretary of War Patterson supported the May-Johnson bill. He said it was the best bill we could possibly get. Eight months later he came out and supported S. 1717. What happened in the meantime? I will tell you a little bit about what happened in the meantime. On January 29, Secretary of War Patterson, the Secretary of the Navy, and almost all of the leading military and naval men received a directive from the President of the United States. I checked on that directive the other day and called the Under Secretary of War and asked him if he would not give me a copy of it. He said, "No; you have to go to the President"; but a directive was received. As a result of that directive, the Secretary

of War and Navy and the Under Secretaries and admirals and generals all supported this particular legislation. Something was said yesterday about who helped to draw up this legislation. Naturally, we do not know the name of every person who helped draw up the legislation, but I am going to name three of them. One is James R. Newman, who is now the special counsel for the Atomic Energy Committee of the Senate. Another is Dr. Edward V. Condon. It is interesting to know in connection with Dr. Condon that he is an appointee of Henry Wallace. Prior to VJ-day when the Russians invited a group of American scientists to visit Russia and attend a conference there, Dr. Condon was one of those invited. It was not until the last minute—and some of these scientists were going over in a Russian plane—that Dr. Condon's permission to leave America was revoked, so he did not make the trip. He is one of those who helped write S. 1717.

The third person is a member of a group at the University of Chicago. This third person is Dr. Harold C. Urey. I have here a letter that Dr. Urey sent to the gentlewoman from Connecticut [Mrs. LUCE] on November 24, 1945, when we were considering the May-Johnson bill. I want to quote just one sentence from this letter. Dr. Urey said to the gentlewoman from Connecticut [Mrs. LUCE]:

In addition to your proposed amendment, I personally would like to see all of the penalty and security violations deleted from this bill.

Now, he is one of those who helped draw up S. 1717 and he wants to see all of the penalty violations taken out of the bill. You can just imagine from this what would happen if this civilian commission ever got the atomic-bomb secret or if Dr. Urey became one of the commissioners.

Mr. VORYS of Ohio. Would the gentleman care to read further to show the reason Dr. Urey gave for wanting to have the penalties withdrawn?

Mr. THOMAS of New Jersey. Yes. He said:

I believe that the Espionage Act of the United States is sufficient to cover violations of many security regulations.

S. 1717, the so-called atomic energy bill, which we are considering today, may turn out to be the most dangerous bill ever introduced in Congress in the history of the United States. Should we enact it into law, and should it not live up to the high ideals of its sponsors, it could destroy America. A vote in favor of it, therefore, may be a vote to give a potential aggressor nation the atomic-bomb secret. Believe me, it is not worth the risk. I hope, with all the strength at my command, that we can defeat this most vicious measure, and thereby delay action, at least until we have real peace in the world.

S. 1717 is the creature of impractical idealists. I do not say that these one-world-minded persons are unpatriotic. I say that their intense ardor for a better world has blinded them. Their faith in Russia is indicative. And yet, when they advocate a free exchange of atomic

secrets with Russian scientists, they completely overlook the fact that all Russian scientists are but tools in a dictatorship of the proletariat. The starry-eyed individuals who molded S. 1717 will strive just as energetically to stack the Atomic Civilian Commission, called for under this legislation. As proof of this, I quote from a document dated June 8, 1946, and picked up at Oak Ridge by the chief investigator for the House Committee on Un-American Activities. The document states, and I quote:

Our next problem is suggesting the right men for appointment to the Atomic Energy Commission.

In this connection, I also desire to read a preliminary report from Mr. Ernie Adamson, chief counsel for the House Committee on Un-American Activities. The report is based on a visit of our colleague, Representative JOHN WOOD, chairman of the Committee on Un-American Activities, and Mr. Adamson, to Oak Ridge, June 4 of this year.

The report is as follows:

PRELIMINARY REPORT

JUNE 26, 1946.

Since about the middle of January I have been conducting an investigation concerning subversive activities at, or in connection with, the operation of the Government reservation known as Oak Ridge, Tenn.

It appears that scientific and engineering personnel who have been separated from Government service in connection with the Manhattan District project have organized various small groups in Chicago, New York, Detroit, and other cities and they in turn continue to cooperate with scientific societies whose headquarters are located inside the reservation at Oak Ridge.

About 4 weeks ago Chairman WOOD and I visited the Oak Ridge Reservation and interviewed the Army officers in charge of security, and other persons, including the officers of two scientific societies above mentioned. We took the statements of these people but have not yet received the transcript from the stenographer. The substance of the testimony will show:

1. That these Oak Ridge societies are composed of young men who are classified as scientific researchers or engineers.

2. The activities of these societies are devoted to the creation of some form of world government.

3. These societies are very active in support of international civilian control of the manufacture of atomic materials.

4. These societies are definitely opposed to Army supervision at Oak Ridge and are just waiting for the day when military administration will be thrown out.

5. The society officers whose statements we have taken not only admit communication with persons outside of the United States but in substance say they intend to continue this practice.

6. The security officers at Oak Ridge think that the peace and security of the United States is definitely in danger.

7. I have obtained a list of active members of these two societies, also copies of literature distributed by them.

8. The CIO is now making a desperate effort to unionize all workers of the reservation. We took statements from the CIO and A. F. of L. organizers. The CIO organizer was very militant and seems to be in close contact with the members of the scientific societies.

9. If jurisdiction and control of the Oak Ridge Reservation passes into civilian hands, the political plans for exploiting the place are well advanced and there would undoubtedly be trouble in the reservation within 6 months.

10. One of the most surprising comments was an expression from one of the young scientists to the effect that the power of the atomic bomb was much greater from a political viewpoint than from its physical aspect.

11. Chairman WOOD has in mind a bill which would create Oak Ridge as a permanent Army reservation, separate and apart from the atomic control legislation.

12. My conclusion, based upon the investigation up to date, is that the Army should exercise permanent control over the manufacture of atomic weapons.

ERNIE ADAMSON, Counsel,
Committee on Un-American Activities.

Supposing our present President or some future President should be influenced by such a "world government—share the secrets with Russia" contingent and the Atomic Commission should have appointed to it one or more persons of the same pink stripe who in turn would influence the hiring of personnel. Can you imagine the kind of personnel we would get? I want to tell you if this should happen I would not give 10 cents for our ability to retain the atomic-bomb secret another year.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield.

Mrs. LUCE. With reference to his remarks on the difficulty of getting the proper personnel on the Commission, I would like to draw the attention of the House to the testimony, with which I am sure the gentleman is familiar, in part II of the Senate hearings, page 172; in which Dr. Shapley describes the all but impossibility of finding five men of the proper caliber to serve on this Commission.

Mr. THOMAS of New Jersey. I appreciate the observation of the gentlewoman. I am not just referring to the Commission, however. I am likewise referring to the persons who will be called upon to guard the secrets down at Oak Ridge, in that we cannot call on the Army as we call on the Army today.

Mr. SHORT. And you have got an advisory committee, a general manager, a division of research, division of engineering, and division of military application. Heaven only knows what sprawling, spawning bureaucracy will be set up if this bill is passed. The sky is the limit.

Mr. THOMAS of New Jersey. As it is now, the atomic-bomb secret is relatively safe. Anyone, from General Groves down, will tell you so. Although they may admit that attempts have been made and are still being made to get the secret away from us. If the atomic-bomb secret is safe now, then why pass a bill which goes out of its way to endanger such security?

On the question of security, section 10 of the bill, having to do with control of information, not only encourages the dissemination of scientific and technical information to foreign nations but it places emphasis on security regulations indicated by the proverb: "When the horse has been stolen, the fool locks the stable."

Is it any wonder that every Communist and every Communist-front organization is rooting for the passage, without amendment, of S. 1717. I dare say there are many good Americans also

rooting for its passage, but I am likewise positive that not 1 out of every 100 Americans know what S. 1717 contains, and I am equally confident that 99 out of every 100 Americans want the atomic-bomb secret kept by us for a while longer.

Mr. O'HARA. Mr. Chairman, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield.

Mr. O'HARA. Will the gentleman agree with me that there has as yet been no set-up agreed upon by the United Nations for inspection or limitation of armament, which would include the atomic bomb?

Mr. THOMAS of New Jersey. That is right. There is no doubt about that.

Mr. O'HARA. Is there any great rush to give our secrets away? When it comes to the time where the nations of the world may want to agree upon a limitation of armaments, inspection of atomic energy, and so forth, can that not be arrived at by the Congress by delegating that authority either by treaty or to our representatives upon the United Nations Organization?

Mr. THOMAS of New Jersey. There is no doubt about that, no question at all. I wish some Members of this House, including some of the majority members of the Military Affairs Committee, would tell the House just what this rush is all about.

If you want to get the cue of who is pushing hard for the passage of this bill, read the Daily Worker, official organ of the Communist Party in the United States, or read, in the New York papers of last week, the suggestion of the Russian delegate, Andre H. Gromyko, that "he favors exchange of data at once." If Mr. Gromyko, the Russian, had drawn a bill for American control of atomic energy and the atomic bomb, he could not have drawn a better bill for Russia than S. 1717, under consideration by us today. Further, it is my opinion that Mr. Gromyko is stalling the atomic negotiations in New York until he sees what this Congress is going to do about atomic control. Is it any wonder, therefore, that I ask you to vote no on the bill and let us get on to business more helpful to the welfare of this Nation?

The CHAIRMAN. The time of the gentleman from New Jersey has expired.

Mr. MAY. Mr. Chairman, I yield 10 minutes to the gentleman from Texas [Mr. LANHAM].

Mr. SHORT. Mr. Chairman, I yield 5 minutes to the gentleman from Texas [Mr. LANHAM].

The CHAIRMAN. The gentleman from Texas is recognized for 15 minutes.

Mr. LANHAM. Mr. Chairman, the many official duties which have been demanding my time have not permitted a thorough study of all the provisions of this measure, but some time ago my attention was called to section 11, with reference to patents, and I have studied that particular section very carefully.

It would be much more than a poor pun or a facetious observation to say of the patent section in this bill for the consideration of a bomb that it is "a-bomb-inable." It would sovietize our American system of patents upon which our prosperity and our progress have been founded.

In his Farewell Address, George Washington, speaking of our fundamental institutions, admonished that the time would likely come when those who were opposed to those institutions and their proper and adequate operation would seek to undermine what they could not directly overthrow. I am inclined to think that these patent provisions, by whomsoever devised, go far beyond the mere mild purpose of undermining.

In our parliamentary system, unfortunately, we do not have a proper jealous regard for the functions and jurisdictions of our respective committees. It is no more the province of the Committee on Military Affairs to deal with patent matters than it is the province of the Committee on Patents to deal with military matters. The subject of patents is a very technical and detailed one. I have been a member of the Committee on Patents for more than 20 years, but I do not profess to be an expert.

Here we have a provision to make obsolete our patent laws and to turn the administration of patent matters over to a commission, the identity of the members of which is still unknown, without any provision that a single member of that commission have any familiarity whatever with our patent laws or our patent system.

The founding fathers of this country were so impressed with the importance of American ingenuity and American inventive genius that for the protection of the inventors of this Nation in making their important discoveries they wrote it into our organic law that for the promotion of science and the useful arts this system should be a fundamental part of our whole governmental philosophy. Thomas Jefferson had as zealous a regard perhaps for this particular provision of the Constitution as for any other, because he realized, as did all of his compatriots of that time and as we, their governmental successors and followers, should realize, that the new republic then and the older republic now depended for its security, depended for its progress, depended for its prosperity, upon the protection of this American genius and American ingenuity which have made our country the outstanding nation of all the world.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the distinguished gentlewoman from Connecticut.

Mrs. LUCE. Is the gentleman familiar with the testimony of Conder C. Henry, former Assistant Commissioner of Patents, which I inserted in the Record?

Mr. LANHAM. Yes, I am. I shall call to the attention of the gentlewoman also the testimony and the recommendations of those who from the beginning have been primarily interested in these patents as applied to atomic energy and who have had charge of the operation of atomic energy from its very beginning.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Kentucky.

Mr. MAY. I am sure the gentleman knows I am not out of harmony with his views on the subject; however, I do feel

that he has criticized the House Military Affairs Committee unnecessarily in that we did not assume jurisdiction of the Patent Committee. The thing came to us in a Senate bill.

Mr. LANHAM. I appreciate that fact, but I appreciate the fact also that the Committee on Military Affairs might well have done what the Committee on Public Buildings and Grounds did on this very day in considering a bill which, among other provisions, had to do with some affairs within the jurisdiction of the Committee on the District of Columbia; we invited the District Committee or a subcommittee to sit with us in the consideration of those important provisions. You are dealing here with the one fundamental thing that has to do with our progress, and our prosperity, upon which it has depended through the years.

Mr. MAY. I would like for the gentleman to tell my colleagues here and his own colleagues that I invited him to come and testify before the committee and waited on him.

Mr. LANHAM. That is true, because I went to the chairman of the Committee on Military Affairs—I am not censuring the chairman of that committee—and told him we of the Committee on Patents were interested in this matter. On the day that it was heard there was a meeting of a committee of which I am chairman and I could not attend. But we did send a man to testify versed in patents, a man who has served as Assistant Commissioner of Patents for many years and also as an examiner, a man who is one of the advisory council of the House Committee on Patents to help us look after patent legislation.

I want to bring to the attention of the committee how much the people who are interested in patents and who know something about them regard this patent provision. I have here a letter received just today from Mr. John W. Anderson, president of the National Patent Council. What is the National Patent Council? That, my friends, is an organization of the small manufacturers of this country; 59 different groups of industries in 38 different States. Surely, we are concerned about their protection, for let me remind you that inventions do not come, in the main, from the high and mighty; they come from the lowly and obscure, and the very thing which led to my sponsorship of the law to keep patents primarily useful for national defense secrets during the war was the filing of an application for a patent by an elderly gentleman who had never invented anything else in the course of his entire life. Eighty percent of our patents come from individuals and from small operators.

Mr. Anderson has written me as follows:

NATIONAL PATENT COUNCIL,
Washington, D. C., July 17, 1946.
Hon. FRITZ G. LANHAM,
House Office Building,
Washington, D. C.

DEAR MR. LANHAM: We wish to confirm, in behalf of National Patent Council, its approval of the attached draft as a substitute for section 11 of the McMahon atomic energy bill, S. 1717, which we understand will be debated in the House this afternoon.

It is understood that there are to be offered a number of other amendments to the bill.

Some have been discussed with National Patent Council and seem desirable, particularly the amendment limiting the duration of the proposed law to 3 years.

Section 11, the council believes, is totally bad in intent and effect. In addition to discouraging invention in the atomic energy field, we believe it would tend to drive American inventive diligence underground. The harsh treatment provided for American inventors it seems certain would increase our exposure to secret disclosures of atomic inventions to undercover foreign agents. This council would deplore thus forcing a black market in inventions relating to the field of fissionable materials.

It is respectfully suggested that Congress examine other sections of this bill carefully to determine the extent to which the entire field of invention, and all industry, would at once be placed automatically within the conclusive control of a presidentially appointed five-man commission in the event that copper, for example, should be proven to be fissionable by any process or under any conditions whatsoever.

National Patent Council, as such, does not presume authority or competence to discuss phases of the bill not relating to research invention, patents, and the patent system. We believe the bill, as it stands, is un-American and contrary to constitutional concepts which have given our country its overwhelming strength.

In the interest of national security section 11 should be deleted from the bill in favor of the substitute provisions hereto attached, which provisions have been the result of many conferences.

Respectfully,

NATIONAL PATENT COUNCIL,
JOHN W. ANDERSON, *President*.

Mr. Anderson enumerates some of the reasons why this section should be revised and amended and modified. As a matter of fact it should, in my judgment, and I believe in the judgment of all versed in such matters, be stricken out and referred to the Committee on Patents. But I am going to offer an amendment to supplant section 11 as it is in this bill and try to provide for the protection of American ingenuity and the people primarily interested in promoting our fundamental patent system.

I have also a letter from the chairman of the patent section of the American Bar Association, Mr. Robert C. Watson, addressed to the gentleman from Alabama, the Honorable FRANK W. BOYKIN, chairman of the House Committee on Patents, calling attention, in addition to the compulsory licensing features of section 11, to the various ways in which the adoption of section 11 would affect deleteriously those who are interested in the progress of America. Mr. Watson writes:

AMERICAN BAR ASSOCIATION,
July 15, 1946.

Hon. FRANK W. BOYKIN,
Chairman, Committee on Patents, House of Representatives, Washington, D. C.

MY DEAR MR. BOYKIN: The section of patent, trade-mark, and copyright law of the American Bar Association of which I am the present chairman recently transmitted to the Committee on Military Affairs of the House of Representatives a resolution disapproving the principal patent provisions of the proposed Atomic Energy Act of 1946, S. 1717. While this bill has apparently not been referred to the Committee on Patents of the House of Representatives, of which you are chairman, it nevertheless seems to me to be appropriate to inform you of our views and to express the hope that the members of

your committee as individuals may sympathize with the position which we have taken and express their views to others when the proposed act is under discussion on the floor of the House. The resolution, which is quoted below, is applicable to the bill as it now stands since the patent provisions against which the resolution is directed have not as yet been changed.

"Resolved, That the American Bar Association approves the principles of S. 1717 to establish a civilian commission for the control of atomic energy, its materials, material sources, production, and weapons, and the dissemination of information thereof for insuring national security; and further that the association disapproves the bill: (a) insofar as it fails to provide for the review, in camera if necessary, by a constitutional court upon petition of an aggrieved party of any act, declaration, or failure to act of the Commission; and (b) furthermore disapproves the patent provisions of the bill: (1) relating to compulsory licensing, and (2) to prohibiting the creation of patent property for certain subject matter."

This resolution of disapproval originated in the 23-member committee on patent law revision of our section, was approved by the section council of 10 additional practicing patent lawyers, and was submitted with the knowledge and approval of the board of governors of the American Bar Association.

There has just been directed to my attention a draft of a proposed amendment to the pending bill which, if adopted, will have the effect of wholly removing from the bill the patent provisions against which our resolution was directed and substituting therefor a series of new provisions dealing with inventions and patents. This proposed amendment follows:

"Pages 34, 35, 36, 37, 38, 39, 40: Cancel all of the patent provisions commencing with line 7 on page 34 down to and including line 18 on page 40 and substitute in lieu thereof the following:

"(a) The Commission is authorized to purchase, for the manufacture or use by or for the United States Government, any and all rights in and to any invention or discovery, or application for patent or patent thereon, relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy.

"(b) The Commission is authorized to condemn, and to determine and make just compensation for, any and all rights in and to any invention or discovery relating to research on or the production of fissionable materials or the utilization of fissionable materials or atomic energy that affects the national defense and security: *Provided, however,* That upon the determination by the Commission that the national defense or security is no longer involved, any and all rights in and to such invention or discovery shall revert to the owner, subject to a non-exclusive, irrevocable and nontransferable license in favor of the Government.

"(c) When any person who has made an invention or discovery relating to research on or the production of fissionable material, or the utilization of fissionable materials or atomic energy and shall have filed an application for a patent thereon and shall have tendered his invention or discovery to the Government of the United States for its use, he shall, if and when he ultimately receives a patent, have the rights to sue for compensation as provided for in this section, such right to compensation to begin from the date of any use of the invention by the Government: *Provided,* That the Commission is authorized to enter into and effect an agreement with said applicant in full settlement and compromise for the use of his invention by the Government.

"(d) If any person is dissatisfied with the determination of the Commission as to just compensation, he may have his remedy by

filing a suit in the United States District Court for the District of Columbia, if filed within 6 months after such determination; and such court, on notice to the Commission and other due procedures had, may thereupon determine the amount of the compensation to be paid such person, as the facts in the case may appear; *Provided,* That in any such suit the United States may avail itself of any and all defenses, general and special, that might be pleaded by a defendant in an action for infringement, as set forth in title 50 of the Revised Statutes, or otherwise. Any final judgment rendered against the Commission under any provision of this section shall have like force and effect as a money judgment rendered against the United States by the Court of Claims in a suit in respect of which the United States has expressly agreed to be sued; and the amount of any such final judgment shall be paid out of any appropriation applicable to the case, if any such there be; and when no such appropriation exists said judgment shall be paid in the same manner as judgments rendered by the Court of Claims in cases under its general jurisdiction.

"(e) Any party aggrieved by any final judgment in a proceeding under this section may appeal therefrom to the Court of Appeals of the District of Columbia, and upon such appeal said court shall have power to review said judgment and affirm, revoke or modify the same as upon appeals in other action at law.

"(f) Attorneys appointed by the Commission may appear for and represent the Commission before any Government agency or judicial tribunal with respect to any and all invention, patent and research matters in which the Commission is involved.

"(g) Any person who has made, or hereafter makes, any invention or discovery utilizing fissionable materials or atomic energy designed or especially adapted for use as or in a military weapon, shall file with the Commission a report containing a complete description thereof. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (1) The sixtieth day after the date of enactment of this act; (2) The sixtieth day after completion of such invention or discovery; or (3) The sixtieth day after such person first discovers, or first has reason to believe that such invention or discovery is especially useful as or in such a weapon."

The principal purpose of this letter is to state to you, on behalf of the section of patent, trade-mark and copyright law of the American Bar Association, that the proposed amendment is, in my opinion, entirely consistent with the previously expressed views of our group and acceptable to it, and that, if the amendment is adopted, our resolution of disapproval of the patent provisions of the bill will no longer apply. The newly suggested patent clauses do not contain those provisions which we originally found to be objectionable but nevertheless appear to amply protect the interests of the public and to insure the national safety while at the same time recognizing and preserving the rights of inventors, research groups, and those who bear the financial risk involved in the exploitation of new inventions, to the end that the advancement of the art of the utilization of atomic energy will not lag behind the advancement of other arts.

Respectfully,

ROBERT C. WATSON,
Chairman.

I have a similar letter—and these I shall incorporate in the RECORD—from Mr. John A. Dienger, president of the American Patent Law Association, past chairman of the patent section of the American Bar Association, and he has

also held a number of other offices of importance. His letter follows:

BROWN, JACKSON, BOETTCHER
& DIENNER,
ATTORNEYS AND COUNSELORS,
Chicago, July 5, 1946.

Re: S-1717, Atomic Energy Act.

Hon. FRITZ G. LANHAM,
Washington, D. C.

MY DEAR CONGRESSMAN: I am writing to call attention to a fundamental mistake which is being made in the patent provisions of the above bill.

It is apparent to me that those provisions were drafted on the erroneous assumption that a patent confers on the grantee the right to practice the invention, and hence it was assumed that if the Government granted a patent to someone on some phase of atomic energy, it would be conferring upon him the right to practice that phase of atomic energy.

This is fundamentally wrong. The patent does not confer upon the patentee the right to practice the invention covered by the patent. It confers only the right to keep others (excepting the Government and its contractors and subcontractors) from practicing the invention without the permission of the patentee.

This basic error pervades the entire section on patents and inventions (sec. 11), pages 32 to 38 of the draft of June 5, 1946, and leads to numerous inappropriate provisions.

The bill should be referred to the House Committee on Patents where this error and its consequences may be rectified by suitable amendment. I should be glad to appear before the House Committee to assist it in its consideration of the bill.

Yours very truly,

JOHN A. DIENNER.

Let me climax this opposition to section 11 with this statement: There have been conferences in the last few days among those who are specially informed concerning the significance of patents as they relate to atomic energy. I refer primarily to Capt. Robert A. Lavender of the Navy. Now, who is Capt. Robert A. Lavender? He is the adviser on patent matters to the Office of Scientific Research and Development, and he was designated also by the War Department as the adviser to the Commanding General of the Manhattan District in carrying on this atomic energy project, and he has, from the very beginning, been connected with this organization and its operation in that regard. He has recommended the adoption of the amendment which I shall offer to supersede the committee provision of section 11 with reference to patents.

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Missouri.

Mr. SHORT. The very able gentleman from Texas has hit the nail right on the head because under the provisions of this bill no individual or corporation can really go ahead and work and experiment and produce until they get a license from the Commission.

Mr. LANHAM. Absolutely, and if you want to kill the goose that laid the golden egg, that hatched into our golden prosperity all through our American history, just adopt section 11 in this bill.

You have heard a good deal about black markets in recent days. Of course,

primarily we are all interested in food, for we need its nourishment and its sustenance to continue our lives and our activities. But from the standpoint of governmental philosophy, if you want to encourage a black market that will drive a dagger into the heart of American progress and American hopes, then adopt this section 11 as it came from the committee.

Why do I say that? Because if there is to be such regimentation as provided in section 11 of any inventor or any discoverer of something primarily useful perhaps in military affairs and also in our civilian life, he must turn it over willy-nilly to this Commission and let this Commission do whatever it may please with it. It is not unreasonable to suppose that there may be some who will be influenced to a slight extent at least by the profit motive which has characterized so much of our American life. Can you not very readily perceive that, with the destruction of our American patent system and turning it over to those absolutely unversed in this fundamental law and its important consequences, we furnish a very fertile field for the agents of foreign governments to divert the discoveries of American genius to those who are hostile to our American purposes and to our American philosophy?

In accordance with permission given to insert in the RECORD the amendments suggested by the conference hereinbefore referred to, I append these amendments, with the exception of the proposed substitute for section 11 which is included in the letter from Mr. Robert C. Watson:

Page 15, line 24, after "material" insert "owned by it."

Page 16, line 4, cancel "pursuant to a license issued."

Page 18, line 5, cancel ", are unimportant" and insert "do not constitute hazards to national health or security."

Page 18, line 11, cancel "inconsistent with the national welfare" and substitute therefor "constituting a hazard to national health or safety."

Page 18, line 21, cancel "are unimportant" and substitute therefor "do not constitute a hazard to national health or safety."

Page 19, lines 2 and 3, cancel "to the extent it deems necessary to effectuate the provisions of this act" and insert in lieu thereof "upon determination that such action is necessary in the interest of the common defense and security."

Page 19, line 17, after "inspections" insert ", with or without the consent of the owner thereof."

Page 19, lines 20, 21, 22, and 23, cancel the following sentence: "Such exploratory operations may be conducted only with the consent of the owner, but such investigations and inspections may be conducted with or without such consent."

Page 22, line 7, after "materials" insert "owned by it."

Page 24, line 23, substitute "(a) or (b)" for "(A) or (B)."

Page 25, line 2, after "device," insert "when such manufacture or use constitutes a hazard to national health or safety."

Page 25, line 17, after "facts" insert "and its opinions."

Page 25, lines 18 and 19, cancel "the Commission's estimate of the social, political, economic, and international effects of such use."

Pages 26 and 27, cancel lines 22, 23, and 24 on page 26 and all on page 27 down to and

including the word "results" in line 17 on that page and substitute in lieu thereof the following: "the Commission in issuing such licenses shall grant them for such periods and under such procedures as the Commission may establish. The granting of such licenses shall be in such a manner as to encourage competition, and where licenses are granted the Commission will not as a condition precedent require the licensees to disseminate technical information and data concerning activities carried on pursuant to such licenses."

Page 48, line 11, cancel "or" and insert ", or 11 (g)" after "6 (b)."

Page 50, insert the following between lines 16 and 17: "(b) The term 'nuclear fission' shall be construed to mean that process which takes place in nuclei wherein the nucleus is split into fragments, at least two of which contain a substantial fraction of the mass of the original nucleus."

Page 50, line 17, substitute "(c)" for "(b)."

Page 50, line 24, substitute "(d)" for "(e)."

Page 51, line 8, substitute "(e)" for "(d)."

Page 51, line 11, substitute "(f)" for "(e)."

Page 51, line 18, substitute "(g)" for "(f)."

Page 51, line 25, substitute "(h)" for "(g)."

Page 53, insert a new section between lines 7 and 8, as follows:

"SEC. 21. This act shall expire 3 years after the date of its approval."

Page 53, line 9, substitute "22," for "20, 21."

Mr. MAY. Mr. Chairman, I move that the Committee do now rise.

The motion was agreed to.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr. JOHN J. DELANEY, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (S. 1717) for the development and control of atomic energy, had come to no resolution thereon.

RECESS

The SPEAKER. The Chair declares a recess of the House subject to the call of the Chair.

Accordingly (at 3 o'clock p. m.) the House stood in recess subject to the call of the Chair.

GEN. ALEXANDER PAPAGOS

The SPEAKER. The Chair designates the gentleman from Massachusetts [Mr. McCORMACK] and the gentleman from Massachusetts [Mr. MARTIN] to escort the distinguished guest into the Chamber, who will take his place in the well of the House, where he may be presented to the Members individually.

At 3 o'clock and 2 minutes p. m., the Doorkeeper, Mr. Ralph Roberts, announced Gen. Alexander Papagos, commander in chief of the Greek Armies and the British Expeditionary Forces during the war in Greece.

The SPEAKER. Members of the House, it is my very great pleasure, and I deem it a distinct honor, to have the privilege of presenting to you this great citizen of the world, the general of the Greek Armies, Gen. Alexander Papagos.

General Papagos stood in the well of the House, where he was introduced to the Members of the Congress individually.

At 3 o'clock and 13 minutes p. m., the general retired from the Chamber.

AFTER RECESS

The recess having expired, the House was called to order at 3 o'clock and 14 minutes p. m.

EXTENSION OF REMARKS

Mr. LANHAM asked and was given permission to revise and extend the remarks he made in the Committee of the Whole and to include therein letters and a copy of a proposed amendment.

THE ATOMIC ENERGY ACT OF 1946

Mr. MAY. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill (S. 1717) for the development and control of atomic energy.

The motion was agreed to.

Accordingly the House resolved itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill, S. 1717, with Mr. JOHN J. DELANEY in the chair.

The Clerk read the title of the bill.

Mr. SHORT. Mr. Chairman, I yield 30 minutes to the gentlewoman from Connecticut [Mr. LUCE].

Mrs. LUCE. Mr. Chairman, if a man, in order to get home safely, must walk along the brink of an abyss, he does well to take that trip with his eyes open and in clear weather. We want, if we can, to avoid the abyss of atomic warfare. It seems that the only road home does skirt that abyss; and unhappily, it is the totalitarian road of the legislation before us. Let us take it if we must. But, in the name of all our liberties, let us take it with our eyes wide open.

I arise in support of S. 1717, an act for the control and development of atomic energy, with a very heavy heart, indeed. We all remember—I believe somewhat unpleasantly—the President's recent emergency strike-control bill. Well, that bill was a tender affirmation of pre-New Deal rugged individualism compared with the socialistic character of this bill. Some sections of S. 1717 might have been written by the most ardent Soviet Commissar. Indeed, the patent provisions—section II—are paralleled nowhere except in Soviet patent law. I urge upon my colleagues, whose legal training equips them to do so, to give their sharpest attention to the amendments offered on this section of the bill.

I am not alone in my opinion of the bill's politically revolutionary character. Through the entire course of the Senate debate on June 15 the author himself, the brilliant and able Senator from Connecticut [Mr. McMAHON] candidly stated that it was unique in American history.

This is a distinct departure from our way of doing things—

He said, speaking of the bill's compulsory licensing provisions. And—

included in this bill are some things which the committee accepted only reluctantly. * * * I would be less than frank with the Senate if I did not emphasize that in some respects we have departed from all our former methods of handling public questions.

And again:

This bill is full of provisions which I would not subscribe to in any other connection (but atomic energy). * * * These extraordi-

nary measures (should) not be considered as a precedent for other legislation.

A study of the McMahon committee's lengthy hearings will reveal how profoundly disturbed all the Members were by the socialistic implications of this unprecedented piece of legislation.

The deceptive language of the declaration of policy to the contrary, there is not one single provision in this bill which will be of substantial aid in promoting world peace, except as it allows for the integration of domestic with international control of atomic energy. Nor is there in it—to quote the New Deal jargon of the preamble again—anything that will increase the standard of living. And as for strengthening free competition in private enterprise—another favorite preamble phrase of the New Dealers—there is many a section which does precisely the opposite. Provision after provision muzzles free competition and depresses incentive and production in all mining, industrial, patent, and invention fields which impinge at any point on the manufacture of nuclear energy.

Why then did the Senate support it so unanimously, and why must this House support it after amendment?

We must support it because nuclear energy, still in its infancy, contains horrible powers for mass destruction. And we dare not, in these oppressive and troubled times, leave the raw materials and processes of nuclear fissions, which even if developed in all good faith for peaceful purposes, are rapidly convertible to bomb manufacture, in the hands of private citizens.

S. 1717 is a tragically necessary defense measure in a world which may again, in 5 or 10 years, flame into total war.

Let me quote a paragraph from the so-called Acheson or State Department report on the international control of atomic energy:

Today, the United States has a monopoly in atomic weapons. We have strategic stock piles; we have extensive facilities for making the ingredients of atomic bombs and for making the bombs themselves; we have a large group of people skilled in the many arts which have gone into this project; we have experience and knowledge obtainable only in the actual practice of making atomic weapons; we have considerable theoretical knowledge of the field which may appear inadequate in future years, but which enables us to evaluate not only the performance of the past, but also what the future is likely to hold.

The chief merit, if not the only merit of this bill, is that it allows our Government to maintain and protect our monopoly of atomic weapons by seizing, operating, and using all available source materials, stock piles, facilities, installations, information and know-how for making bombs.

Atomic energy today is preponderantly a weapon—a weapon of catastrophic character. This bill controls and safeguards for the United States of America all atomic weapons of the present, and permits the development of bigger and better—or one should say—worse ones, if this Nation should, in spite of all its sincere efforts in the direction of international control, be forced into a worldwide race in atomic armament.

It seems to me that there is nothing to be gained by this House trying to deceive itself, or the American people about the true intent of this legislation, which is to secure and promote, for so long as we can, or until international atomic control is achieved, our national monopoly of this fearful weapon. Moreover, even if we deceived ourselves today into believing that this is preponderantly a bill for the peaceful development of atomic energy, we should not in the least deceive our world neighbors who will see at once right through the sweet and peaceful language of the preamble to the explosive heart of the matter: the bill's intent is to enable our Nation to amass an adequate stock pile of bombs for the purpose of defense and attack in war—should war again be suddenly thrust upon us, and to keep pace, in the research, and experimental fields with new processes in nuclear fission. It is the latter urgency which above all requires civilian control and civilian participation. That is why we must not leave the matter in the hands of the military who, while they can preserve the atomic status quo, can never make advances in this field. Under a civilian commission alone can such advances, in peacetime so-called, be made.

I do not support the House amendments which require one, and permit two, military members on the Commission, because it seems to me that their presence there is superfluous. The military liaison committee provided for in the Senate version adequately safeguards Army and Navy interests in the program of a committee, which in spite of its all civilian character, must be, until world peace is assured, chiefly devoted to military, or defense and security, considerations. Moreover, the assumption of those who offered these amendments is somewhat illogical. They seem to believe that the President may err in the choice which is his, under the bill, of five wise and patriotic civilians, but will be able to pick, among the military, with inspired wisdom.

These amendments provide a straw issue, which if too long or passionately debated here, will distract the House from a useful consideration of the sections of the bill concerning compulsory licensing and patents, and its other unique and socialistic features.

The same holds true for the argument against the committee amendment requiring a military officer to be director of the Military Applications Division. I, personally, favor for several reasons keeping an all-civilian facade on this commission, if for no other reason than that the appearance of military men on the commission is sure to discomfort our own people, who are traditionally alarmed when members of the armed forces are given undue prominence in peacetime. Americans are wont to view them as omens of war, and an attempt to reverse the historic American policy, which is to keep everyone visually, if not psychologically, "in civies", until a split second after the first shot is fired at us.

I am also against the amendment which permits the President to authorize the armed forces to manufacture atomic bombs. Unless we are to assume—

surely a most unpatriotic assumption—that the President will choose five incompetent or subversive civilians bent on leaving this country weak and defenseless, this provision may result in either an exhausting duplication of effort, or in a constant wrangle between the armed forces and the Commission, as to which shall make the bombs, and how many.

There are only two consoling features about this socialistic, though I repeat necessary, legislation:

First. It gives scientists and technologists, and those who may be able to use fissionable material in medical therapy, and other scientific investigations of Nature's beneficial secrets, every freedom consistent with its major concern: The complete control and improvement of bomb manufacture, in order to secure our country's defense.

Second. The legislation permits, though it does not promote, the integration of domestic or national control, with a world plan for atomic control.

When—or rather, if—a reliable and effective mechanism for the international control of atomic energy can be formed in the UN, the domestic controls provided by this bill can be quickly and smoothly geared into the controls of that Authority.

To be sure, the best opinion, as reflected in the State Department and Baruch reports, holds that it may be several, or even many years before such a world authority can be set up, and made effective. Every provision of this domestic bill will have to be duplicated on an international scale. Any world authority to be effective must begin with world ownership of all atomic raw materials, and provide rigid international inspection and licensing systems. The acceptance of these prime conditions may call for a greater abandonment of national sovereignty than some nations must endure. Still, the creation of an effective world authority, along the lines laid down by Mr. Baruch, is not impossible, though I confess it seems to me unlikely. Nevertheless, to this noble task we must dedicate all our efforts. We must pray, in the name of survival itself, that the UN can be employed for atomic control.

But, until that day comes, it is plain that this Nation must embrace, however, reluctantly, the legislation before us, which is a complete device for domestic control of a highly expensive, highly complicated, highly industrialized, and highly dangerous process, which is rapidly convertible to the purposes of war.

And now, while I support this bill, as a defense measure in a world which is no nearer peace than it was 10 years ago, I feel that there should be laid before you the very real dangers to our American way of life involved in keeping this bill on the books as permanent legislation.

If all peace treaties had been signed and agreeably accepted; if the desperate political chaos of Central Europe and Asia had begun to resolve itself into democratic order; if Soviet Russia showed a sincere inclination to retire to her prewar borders, and to disband her Trojan horse political parties in our own

and other countries; if the United Nations were really one big happy family; and if there were not, according to the State Department report, "the already launched international armament race"; in short, if we entertained the heart-warming hope of world peace, instead of the soul-sickening fear of a third world war, I should fight this bill to the last ounce of my strength. For in such circumstances, this bill could, and no doubt would, then be used as a perfect instrument for the socialization of America.

Let us for a moment indulge in an act of imagination. Let us suppose that some American scientist, in the year 1776, had not only discovered electricity, but had managed to run it through a high voltage cable. Imagine that this was the first way that electricity had ever appeared on the world scene. Let us then suppose General Washington had been able to spread this secret invention before the path of a regiment of Red Coats, who in crossing it, were fried to a cinder, every man jack of them. In short, let us imagine that the first known application of electrical energy was for the electrocution, in war, of a thousand men. The fear and horror aroused by this sizzling incident throughout the civilized world of 1776 would have been quite as great as the fear and horror caused by our bombing of Hiroshima.

"Americans discover ghastly weapon for mass destruction," every paper in the world would have proclaimed. And: "New and revolutionary form of energy threatens to destroy mankind." And so on. And then suppose we had been able to keep "the secrets of electrical energy" until the First American Congress assembled. That Congress would have been, in those circumstances, I believe quite justified in proclaiming—I now use the language of the bill before us:

The significance of electrical energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved.

And that First Congress would have been quite as justified as this one is for patriotic and political reasons in passing a bill for the "development and control" of the new energy.

Is there any need to develop this thought? If you will read this bill, imagining that it had been passed, say in the year 1800, for "electrical energy", you will see at once how totally different the economic and political development of America might have been. As to whether or not our living standards would be as high as they are now, after a hundred years of Government monopoly of electric power, is for each man to decide according to his own political philosophy. It is also any man's guess as to whether our monopoly in the electrical energy field would have promoted peace or encouraged war. But one thing is certain: That Government monopoly of electrical energy would not have encouraged free enterprise. If that legislation had remained on our books, by this time we would be a fully matured Soviet republic.

Let us get this quite straight in our own minds: It is not what men discover that changes the structure of society; it is how men legislate upon those discov-

eries which change the structure of society.

At one point in his debate on the Senate floor, Senator McMAHON said:

The committee became convinced that (atomic energy) wrote its own rules. It writes them out of the sheer necessity that is inherent in this tremendous force.

Now that is, I submit, nonsense. And Senator McMAHON must have thought so himself, for at the end of this very same debate, he concluded by saying:

Aware of their unique responsibility as molders of (atomic energy) the committee members labored long and arduously to forge in the fires of democratic action the finest instrument they could devise in the discharge of their grave assignment.

Neither Senator McMAHON, nor we, nor the scientists, nor anybody with a logical mind can have the proposition two ways: either atomic energy molds us, as he first claimed, or we mold atomic energy, as he afterwards stated. The latter is, of course, the truth. The plain fact is that this man-made law will mold the use of God-given atomic energy. Nor was this bill written, as the able Senator claimed "out of the sheer necessity inherent in that"—inhuman—"tremendous force." This bill was written out of the human horror and fear that gripped the Senators when they thought of the tremendous human forces in other lands that might one day be able to hurl atomic bombs in a surprise attack on us. Human fears alone—chiefly of foreign powers—devised this law, which is—or should be—a law for keeping us supreme in the field of nuclear fission, and at the same time keeping the knowledge of how to make bombs away from our enemies. The able Senator said that this bill was forged in the fires of democratic action. It was not. It was forged in the fires of totalitarian action which are sweeping toward the West, and have already begun to burn holes in the fabric of our democratic civilization. Our fears concerning the future intentions of aggressive totalitarian nations dictated this bill and its provisions were born of a psychological necessity, and not a scientific one: the dread of sudden attack, and the belief that one way, perhaps, to forestall it, was to be in a position to retaliate overwhelmingly.

We have devised this law, not to encourage the free enterprise system, or industrial research, or even the means of curing cancer and leukemia, but to protect ourselves so long as we can from greedy and lawless enemies.

But to return to the inherent threats in this necessary bill to our whole American way of life, in the event it should stay permanently on the books in a time of real peace in the world:

In chapter I of section III of the State Department report, there appears this significant phrase, which may or may not have been written by Mr. David Lilienthal, of TVA fame, one of the reputed authors; and, according to rumor, a man slated to be one of the five atomic commissioners. I quote:

Reactors for producing denatured plutonium will be large installations, and by the nature of the process they will yield large amounts of energy as a byproduct. As the technology of power development by this method expands, ways will be found for utilizing this power both as heat and elec-

tricity. The existing plants are not designated to operate at a sufficiently high temperature for the energy to be used for the generation of electrical power. One of the first research and development problems—of the Authority—would be to develop designs of reactors such that the energy released would be in form usable for the generation of electrical power.

And again, in chapter III of section II of the same report:

We believe that the development of rather large power units for heat and conversion to electrical energy is a program for the near future; that operating units which will serve to demonstrate the usefulness and limitations of atomic power can be in existence within a few years, and that only the gradual incorporation and adaptation of such units to the specific demands of contemporary economy will involve a protracted development.

If Mr. Lilienthal is correct, and I believe he is, in assuming that atomic energy could be used to generate electrical power, and if this legislation stayed on our peacetime books, the commissariat—which is what this commission would then become—could at vast public expense develop public power which could, and probably would, put all privately owned power plants out of business one by one, slowly or rapidly. Thus, in passing I call to the attention of the gentleman from Mississippi [Mr. RANKIN] that this bill offers the means of suppressing a cherished project of his: TVA.

I think that an awareness of the vast socialistic import, in the power field, of this legislation, may explain much of the violent left-wing enthusiasm for the bill and the fervent support that the Daily Worker has given this legislation until recently.

Here are some further clues which will perhaps help us to understand the hot-eyed support some left-wingers are throwing toward this bill:

On page 50, line 14, the definition of atomic energy is so broad that a commission of purposeful left-wingers could, conceivably control practically all forms of energy now in use, which is not, at least obviously, the intent of the bill.

On page 11, line 17, and on page 12, line 3, the language makes the Commission the exclusive owner of all facilities for the production of fissionable materials, other than facilities useful in certain very limited fields of research. This completely does away with private enterprise and free competition in these fields, even where the production of fissionable material does not constitute a hazard to public health or national security. No such Government monopoly exists in any other field in America today.

On page 13, line 24, and page 51, line 25, in connection with manufacture of production facilities, the term "facilities" is so broadly defined that it can include equipment which may have been designed for other purposes, by or for industries having originally nothing to do with nuclear fission.

On page 26, line 8, the licensing powers for private use of atomic energy are so arbitrary and so cramping in time, that it is impossible to imagine any person or organization willing to risk funds in any enterprise making use of atomic energy. This further increases and en-

trenches complete Government monopoly of the production of atomic energy, even where that production does not endanger public health or national security.

Under section 10, called Control of Information, there are provisions for the dissemination of information which authorizes the Commission to establish libraries, newspapers, and employ all information channels, according to its own discretion. The type of information is not clearly defined. Such information services might make the OWI look like penny pamphleteering; and it is only reasonable to suppose that a vast permanent bureaucracy might use it for the dissemination of political ideas, under the guise of helping the common man to understand the atomic age.

I have already referred to the dangers inherent in the patent provisions, Section eleven. This section represents a complete departure from the fundamental and basic principles of the United States patent system, for it removes patent protection in the whole field of the production of fissionable material, and in the field of the utilization of fissionable material for military weapons, as well as for all inventions, to the extent that they are used in the conduct of research or development activities in certain prescribed fields. It revokes patents already granted, and would prevent the patenting of research instruments manufactured for the conduct of research in this field.

The patent provisions alone will affect thousands of patents. One has only to reflect on the immense variety of the industrial equipment used in the Manhattan Project, to understand this. These are but a few of the socialistic features of the bill which might change the structure of our government in the event that in peacetimes, the commission should ever be controlled by men of the mind, say of Harold Laskie." You will find them as you study the legislation.

If, in view of the needs of national security, it should prove unwise to modify by amendment all these socialistic features, I should then support any amendment calling for the expiration of this act at the end of a reasonable time. For while I do not view this sovietizing of American power sources, and all related facilities and inventions, as an imminent possibility, if there is not adopted an amendment for the expiration of this act at the end of a reasonable time, it becomes a probability in the next two decades.

I repeat, there is nothing in the "logic of atomic energy" which requires that atomic energy must be used to sovietize America. Only a human mind is capable of logic, or for that matter, of illogic, as when a man speaks of the "logic of atomic energy." If America is eventually sovietized, as a result of the wartime discovery of atomic energy, it will be because the Congress, in fear and funk, allowed itself to be duped by the belief so dear to the heart of the mystical Marxian that logical matter disposes of mindless man, rather than that logical man disposes of mindless matter. Energy and matter, which we now know to be one, are both amoral. Man only is moral or immoral. We have only to

reflect that if all the large nations of the world were led today by moral men, instead of immoral ones, atomic energy, like all the other power sources, coal, gas, oil, electricity, which we have developed in the ways of peace before, would not require such totalitarian legislation as has for their peaceful development.

The really immoral feature of this bill is that it implies, if indeed it does not state, that in time, atomic energy itself, can and will automatically provide "the answers to the atomic age" without any mental effort on our part; that it will one day solve all our social, political, and economic problems, like some powerful, alert, conscious genie out of a bottle. Well, it won't. Not any more than coal, or gas, or oil or electricity, or radar, or radio, or television have solved in the past the recurrent problems of war and peace.

The plain fact is, that whether we pass this bill or not, we are still going to have to face, in the years ahead, the problem of industrial unrest, the problem of famine and revolution in Europe, and, above all, the problems created by Soviet ambitions and Soviet ideologies. The discovery of nuclear fission has not changed, and will not solve, one underlying problem in the world today. At worst, in the form of bombs it can aggravate them greatly. At best, in the form of heat or electrical energy, or cancer and leukemia cures, it can ameliorate them only slightly.

Moreover, today and tomorrow we will do well to remember that every scientist who testified before our committee, or the Senate committee, said that in from 5 to 10 years Soviet Russia, and any industrial nation with access to sources of uranium and thorium can make atomic bombs—and they insisted of a destructive capacity so much greater that the present bombs will look by comparison like fire crackers. So this bill, which can never solve our domestic economic problem, except as some in this House may imagine that communism is a cure-all, gives us only a temporary respite from the fear of atomic warfare, even as a defense measure. Only a wholly effective system of world nuclear control can guarantee us for the next two decades against atomization.

And even if we do achieve international control, we will not have solved the problem of war itself. I am sorry to be so realistic, but I think that the American people are at long last hungry for truth, however painful. V-1's and V-2's and large flights of B-17's and 29's will still suffice for greedy or frightened nations which are driven by their greeds or fears toward mutual obliteration.

We have heard little to date of the existing new and terrible discoveries in biological and chemical warfare, even more frightful than atomic bombs. Senator McMAHON warned that this legislation must not become a precedent for new legislation. Those will require new legislation for which this legislation will certainly be a precedent.

No; we have not solved any fundamental problem of peace or war with this bill. But, nevertheless, I am for it, for its passage will give our beloved Nation

a few more years in which to think through the problems of our international relations. And think hard and straight and honestly, like courageous, liberty-loving, and God-fearing Americans, is what we've all got to do, if we really hope to avoid another Armageddon.

Mr. Chairman, the real problem of the age is how shall we find economic and physical security, while at the same time safeguarding our political liberties. This legislation, S. 1717, epitomizes this crucial problem of our age. It does, without any shadow of doubt, promise us at least 5 years of security from atomic attack. But its essential principle, which is state monopoly and control in the hands of a few administrative appointees, strikes near to the heart of political liberty.

Patrick Henry said, "Give me liberty or give me death."

Perhaps before this debate is over many of you may feel inclined to echo Patrick Henry's noble words.

But let me point this out: If your choice were truly a personal one, that is to say, if you, as one individual preferred death to losing your political liberties—you would be justified and possibly, even in the year 1946, honored for making it.

But your choice is not personal, unhappily. If you vote against this bill you may be choosing death for millions of your fellow citizens by atomization.

I, for one, dare not make such a ghastly choice. I support S. 1717, because I believe it offers the best possible solution to the problem of defending countless American lives in a world which is neither at war, nor at peace.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the able gentleman from New Jersey.

Mr. THOMAS of New Jersey. The gentlewoman mentioned the witnesses we had before the committee on this bill. Of course the gentlewoman recalls that we had only two witnesses on this bill.

Mrs. LUCE. That is correct, but as they represented the Army and the Navy and one of them was the Secretary of War himself, and they expressed themselves as quite satisfied with their representation in this bill, I am willing to believe that they are satisfied, and are sincere in not wanting anymore representation than that afforded by the military liaison committee.

Mr. THOMAS of New Jersey. Does not the gentlewoman believe, though, that we should have more witnesses in connection with this very important matter?

Mrs. LUCE. The gentleman has asked a most important question.

Let me assure my colleagues that since this atomic matter first appeared in the House as a legislative matter everybody, the War Department and all its witnesses, the scientists who appeared before our committee and the Senate committee, and every member of both committees, has changed his mind over and over as the subject unfolded before him. By that I mean that in our almost 6 or 8 months' effort to understand this evolved and still-evolving legislation, we find that every day, even every hour, that we consider it, we see some new

angle or significance both in the legislation itself and in the world-wide implications of atomic warfare. I just do not believe that for some miraculous reason, at the precise end of the 5 months' Senate hearings, the Senators learned, felt, understood, and knew everything they or we would ever be expected to understand on the subject of atomic-energy legislation. If the Senate committee had gone on one more month this bill would have been a different bill. And if we go on two more months or three more months, it will also be a different bill.

Mr. JOHNSON of California. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to my colleague from California.

Mr. JOHNSON of California. In one of the hearings the gentlewoman tried to develop the point with the Secretary of War that it might be possible to divide the problem up into two parts, one the military aspect and one the civilian aspect. Would the gentlewoman enlighten us on her ideas on that?

Mrs. LUCE. I will come to that if time permits me to develop it in my statement.

Mr. SHORT. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentleman from Missouri.

Mr. SHORT. Of course, the bill itself in the first section, states that this is a field in which unknown factors are involved; therefore any legislation will necessarily be subject to revision from time to time.

Mrs. LUCE. Obviously, I wish someone would tell me a field of any sort in which unknown factors are not involved. This statement, in the preamble, is naturally superfluous.

Mr. DURHAM. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentleman from North Carolina.

Mr. DURHAM. May I call to the gentlewoman's attention that this bill permits research in weapons by the armed forces?

Mrs. LUCE. Yes; that is quite correct. I thank my colleague, and, as I said before, the military services appear quite satisfied with the atomic scope afforded them by the bill. What I am dissatisfied with is the socialistic scope which the bill would afford the civilian representatives in the power field in peacetime.

Mr. MAY. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I gladly yield to our chairman.

Mr. MAY. I believe you stated that it gives every possible freedom to individuals in scientific research and that the Commission can prohibit the War Department from doing anything about it.

Mrs. LUCE. That is correct—every freedom is accorded to the scientists, as a category consistent with Government control and monopoly. In this connection, may I point out that the main element in the development of atomic energy is precisely scientific personnel. It is the heart of the problem, really. By the very nature of the subject all fundamental developments leading to further

applications of sources of nuclear energy for war or peace must come from physicists, chemists, and mathematicians, and, to a less extent, inventors. All fundamental changes in the processes must originate in the minds of men—specifically, scientists. Mind molds matter, Marxians to the contrary. This is why civilian control is necessary if we are to make progress. The two or three hundred keymen in the nuclear field will, I fear, just not work for the Army, in an Army framework, or under Army regulations, in peacetime. This bill does give them a maximum of freedom, with which they may then be able to make maximum efforts in further research.

Miss SUMNER of Illinois. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentlewoman from Illinois.

Miss SUMNER of Illinois. I think the gentlewoman's analogy about the discovery of electrical energy in 1776 was very interesting, if one thinks about it, because, after all, in 1776 Benjamin Franklin, one of the authors of the Constitution, had discovered electricity. They all realized that it was a power that would change the whole world. What did they do? They buttressed the young Government with a policy of friendliness toward all and justice toward all, and they did not give the invention to one small group of people like the Lehman Bros., or whoever will compose this commission that Mr. Truman may appoint, but they let the people use it in the interest of freedom. It seems to me the way to handle this thing is to do it the way they did then. That has been proved a success. Let the Army use it for their purposes, and let the rest of the people use it for their purposes.

Mrs. LUCE. The lady will excuse me, but my own analogy somewhat breaks down when I compare electrical energy with nuclear energy, for while it is not a difference in kind, it is a difference in degree. There is no shadow of doubt that the potential destructive force of electrical energy in the year 1800, or even now, cannot be compared with the destructive potentials of atomic energy.

THE "SECRETS OF THE BOMB"

And now, Mr. Chairman, under leave to revise and extend my remarks at this point, I would like to add a few words about this highly controversial question of the bomb's "secrets." Some Members speak as though there were one, or even a dozen, or 20 bits of paper containing atomic formulae which, if they could be "handed over," or "snatched," would destroy our national supremacy on atomic bombs. Anyone who has studied, even as a layman, this subject knows that there is no such manageable sheaf of formulae to hand over.

For the last 7 years every physicist in the world has realized that in principle, nuclear energy could be released from certain substances and practically all of them knew, broadly, how to do it. At the same time every atomic scientist realized that this would be a staggering job, many thought too immense to be practical, that there would be innumerable difficulties and hazards to overcome. Everyone knew that there were a number of ways in which the crucial materials

could be made, each with its special difficulties, and that colossal efforts in manpower, brains, skills, and wealth would be required to design, lay out, and build up the vast plants necessary if success was to be achieved. But as to an atomic formula or a secret which should, or should not, be "handed over" it is just as silly to talk about this as to talk in the year 1946 about "handing over" the secrets of making airplane engines to a foreign power. Even I know that a mixture of gas and air explodes if ignited, and it is plain that this phenomenon is used to drive a propeller. But is it a long step from that knowledge to building a B-29, manned for action.

When this is realized, surely the silliness of cries like "Do not share the secrets" must be plain. As I say, we all know that you cannot "hand over the secret" of making even relatively simple things like airplane engines. Why, even if you handed over the engine intact the users have to be trained in manipulating and maintaining it. I do not know whether the Members who talk about "giving away the secret" really mean that the Commission intends to invite a host of technicians and engineers from Soviet Russia to come to Oak Ridge and Los Alamos for a complete course of instruction and training in all the complicated processes which it has taken hundreds of scientists and thousands of engineers years to develop. But, unless this is what they do expect the Commission to do, their talk about giving away our secrets is largely meaningless.

For example, in this war there have been instances of a piece of German equipment—a dive bomber, or a V-2, falling intact into our hands. Thereafter, it might have taken many months, even years, even with these complete models, plus the essential scientific formula before us, to develop similar weapons of our own. And the machinery of Oak Ridge is infinitely more complicated. If, for example, we could conceivably export it intact to Soviet Russia tomorrow, without a thousand and one blueprints, without hundreds of skilled workers, and key scientific personnel, they might be many, many months making the equipment work to produce a bomb, and even years in duplicating or copying it.

I do not for a moment dare assert there are not many, many things foreign governments might like to know about Oak Ridge, for it would certainly speed up the time it will take them to perfect their own processes. But when we talk about giving away secrets, we talk at cross purposes about this bill.

I submit, Mr. Chairman, it is one thing for a man to share with a married friend his "secrets of how to be happy though married"; it is quite another to share his wife with his friend. So long as we do not share our raw materials, our plant structure, our scientific personnel, and our skilled workers, and what might amount to a trainload of blueprints, and, above all, our bombs, with foreign powers, we need not worry too much about sharing "atomic secrets" with foreign powers.

This bill is necessary for one paramount reason: In order to facilitate the widening of our own field of atomic knowledge and know-how as rapidly as

possible—in short, to get and stay well ahead in a field which several nations have already entered. If we leave this thing, as so many wish, in the hands of the military, while we may succeed in retarding atomic research in other nations, we will retard it even more in our own. And by seeking to deny others any advantage, we may deny ourselves even more—thus falling behind in the end in the atomic armament race that, according to the State Department, is already under way.

(Mrs. LUCE asked and was given permission to revise and extend her remarks.)

Mr. MAY. Mr. Chairman, I yield 10 minutes to the gentleman from Mississippi [Mr. RANKIN].

Mr. RANKIN. Mr. Chairman, it is not my intention to even attempt to answer the powder-puff arguments of the very delightful lady from Connecticut [Mrs. LUCE].

This is one of the most dangerous pieces of legislation that has ever come before the American Congress.

Our country today is standing on top of the world. The civilized world is looking to us for leadership. Everybody with any intelligence knows that America is not going to use the atomic bomb to destroy other nations. Then why should we plunge from the highest pinnacle to which we have ever ascended or ever climbed, at the expense of the toil and sweat and blood and tears of the American people and throw away the most powerful weapon on earth, which the enemies of this country are striving day and night to get into their hands?

This is one of the saddest days in the history of the world, when communism, the enemy of Christianity, the enemy of our form of government, the enemy of our way of life, murdered Mikhailovitch, that patriot that we heard praised on this floor of this House by the head of his own country.

As you know, I am the ranking Democrat on the Committee on Un-American Activities. I offered the resolution that created that committee. I have taken more abuse from the Reds, the Communists and their fellow travelers in this country than any other man who has been in public life in my day, and I am going to speak so plainly that you and they can understand it.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from Kentucky.

Mr. MAY. I want to challenge that last statement. I do not think the gentleman has had as much of it as somebody else.

Mr. RANKIN. The gentleman from Kentucky has merely had the first dose.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from Michigan.

Mr. DONDERO. Permit me to say to the House that that committee is the only committee that Congress has to which it can go and find out information on these subversive activities in this country.

Mr. RANKIN. The gentleman from Michigan is correct.

I put the safety of my country first. My country comes first at all times, and I am opposing this entire resolution because I think it is one of the most dangerous measures that has been proposed since I have been a Member of Congress.

Leave this atomic energy, this atomic bomb, in the hands of our military authorities for 5 years. Why all this smear of our military authorities? You have never seen a traitor who graduated at West Point or Annapolis, and I don't believe you ever will. They have the interest of this country at heart, and they are protecting it from these alien spies who are after it, and holding it so that it may be used in case of attack.

You know that little Canada, glorious Canada, arrested those spies that had been down here, down to Oak Ridge, stealing the secrets of the atomic bomb, in order to use it against you and me and the rest of the American people.

There are spies down there now, and the investigators of the Committee on Un-American Activities are down there on their trails. Here you are proposing to do what they want us to do, proposing to do by legislation what they are attempting to do by stealth.

I am not criticizing the Committee on Military Affairs. I am not questioning the patriotism of any Member of this House. But, so help me God, I would rather see this bill defeated than anything else that could occur at this time. I suggest that we send it back to the Committee and say to the world, "We are going to keep this atomic bomb where it is today." We already have a plant built at Oak Ridge that cost us \$2,000,000,000. That plant covers 70 square miles. We know how to make these bombs. We have a supply already made. We know how to distribute them. We have the planes already built for that purpose. We have the trained aviators, and if you do not believe it, go down to Trans Lux tonight and see that demonstration. Do not let anybody tell you that was a flop. You will not come back here with that impression.

Let us say to the world, "Behave yourselves, quit murdering innocent people all over the world. Quit raping the helpless Christian innocent women of Europe. Stop the robbing and murder of the helpless people of Europe."

A minister of the gospel in New Jersey wrote me and said, "Is there nothing that America can do to stop the raping of the innocent Christian women of occupied Europe by the Communists that are dedicated to the overthrow and destruction of everything we stand for?"

If the Communists had this bomb and we did not, this Capital would not last 60 days, and you know it. If the Communists had this atomic bomb and we did not, London would not last 60 days, nor would New York or Pittsburgh. They would use it to destroy everything that Christianity has built in the last 1900 years.

So I say the thing to do is send this bill back to the committee, stand where we are, go back to the American people and find how they feel about it, talk to those boys who fought and won this war.

I talked with a young man who had been to Nagasaki. I wish every Member of this House could talk to that young man and just find what he saw, and picture Washington if this bomb was in the hands of the gang that murdered Mihailovich today, and we had none.

This is my country. I have taken all the abuse I am going to take. I am going to answer back from now on, I can tell you that. I have taken all the abuse from these Reds that I am going to take. I propose to call a spade a spade. You are not going to wreck my country if I can prevent it; you are not going to take the only weapon we have now to protect ourselves and give it to our enemies. God forbid.

Jefferson warned us, and Washington warned us that our policy should be "peace, commerce, and honest friendship with all nations, entangling alliances with none." Let us say to the world, "We will lead the way into an era of peace, everlasting peace, but we are not going to hand you the gun with which to destroy the civilization of mankind."

Send this bill back to the committee, and you will be doing the will of the vast majority of patriotic Americans in every State in this Union.

You will be saving America for Americans and preserving the peace of mankind.

The CHAIRMAN. The time of the gentleman from Mississippi has expired.

Mr. SHORT. Mr. Chairman, I yield 15 minutes to the gentleman from Iowa [Mr. MARTIN].

Mr. CASE of South Dakota. Mr. Chairman, will the gentleman yield?

Mr. MARTIN of Iowa. I yield to the gentleman from South Dakota.

Mr. CASE of South Dakota. I notice the language on page 20 of the bill provides that the Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources, a reservation of certain materials to the United States. I wonder if it was not an oversight in drafting the bill to place that requirement simply upon the Secretary of the Interior. The Secretary of Agriculture issues a great many permits dealing with the location of mining claims; in fact, all the mineral lands in the national forests are under the control of the Secretary of Agriculture. If this is really intended to control those things, it would seem to me it would be necessary to include the Secretary of Agriculture in the language of the bill.

Mr. MARTIN of Iowa. I appreciate the question, but I am not prepared to answer it now. I would rather reserve the answer until later in the debate, and proceed now with my own discussion of the bill.

Mr. CASE of South Dakota. I understand the gentleman wishes to discuss the bill, but I thought that question should be raised so that somebody could check up on it.

Mr. MARTIN of Iowa. I thank the gentleman. Mr. Chairman, I have attended every session of the committee on this bill and I have a few observations to make that I think are important to bring out at this time.

ARMED FORCE REPRESENTATION AND PARTICIPATION

The bill, S. 1717, if enacted into law will be known as the Atomic Energy Act of 1946. This legislation has to do with the development and control of atomic energy both for civilian purposes and for military purposes. In both fields so many unknown factors are involved that we can hardly generalize or advocate fixed policies without tremendous risk of overlooking some factor or factors that may lead to the very destruction of the thing we are striving to defend or protect.

Because of my membership on the Committee on Military Affairs and because of the responsibility of that committee to the Congress and to the Nation in the matter of guarding and supporting the defenses of our Nation, I have given particular attention to the impact of the atomic bomb in the field of our national defense.

Every person in the United States who has heard about the atomic bomb is deeply impressed with its potential role as a weapon of aggression, and those people most closely connected with the development of atomic energy have displayed greatest concern over the danger to all life in any country upon which atomic energy is hurled as a weapon of attack.

America is not aggressor-minded, and the United States has proven to the world in both World War I and World War II that her people do not covet the assets or the territorial possessions or the form of government or any other nation on this earth. On the basis of our own conduct in international affairs during the past few decades we will have very little difficulty in convincing other nations that we will not likely start any war of the future. On the other hand, our conduct at the outset of World War I and World War II is ample proof to the world that we will very likely be drawn into any major war that is started anywhere on this earth, and of course there is always the possibility that we may be the first one attacked. It is, therefore, exceedingly important that we who are charged with the defense of our Nation give full consideration to the development of any possible defense against any potential weapon in any future war. The most important single duty confronting those of us who are charged with the responsibility for our national defense is to develop a defense against the possible use of the atomic bomb by any other nation against us in such a war.

Scientists have stated quite emphatically that there is no known defense, but if our Nation is to survive any future war those of us who carry this responsibility must not fold our hands and give up without trying to the utmost of our ability to develop a defense that will save our Nation from such disaster.

I have never looked to the inventors of potential weapons nor to the manufacturers of potential weapons as best qualified to govern or direct the military application of such weapons. We have approximately 1,500,000 professional soldiers and sailors in our Nation today who are devoting their entire talent and service to the defense of our Nation. At no time in history have the armed forces of

our Nation been confronted with a greater challenge than confronts the armed forces today in the matter of the atomic bomb. I cannot subscribe to any program that disqualifies each and every one of our armed forces from active responsible participation in the control of this greatest of all known potential weapons in the face of the challenge the atomic bomb has created.

I do not advocate military control of the Commission, unless you assume that one or two members of a five-man Commission would control the Commission. I offered the amendment which the Military Affairs Committee adopted—section 2 (d) on pages 8 and 9 of the bill—to remove the disqualification of members of the armed forces from serving on such Commission and to limit the number serving on such a five-man Commission to not more than two members. This limitation is a guaranty against military control of the Commission. Another amendment offered by the gentleman from Ohio [Mr. ELSTON]—section 2 (a) on page 3 of the bill—makes the appointment of one representative of the armed forces on the Commission mandatory, but my amendment leaves the appointment of the second member entirely within the discretion of the President.

My amendment also qualifies any member of the armed forces for appointment as Director of Military Application of Atomic Energy. You will find by reading the bill that this executive position is one of the four positions placed under the general manager, who is charged with the administrative and executive functions of the commission. My amendment, section 2 (d), leaves the matter of appointment of a representative of the armed forces to this position to the discretion of the President, but the committee adopted an amendment to section 2 (a), which you will find at the top of page 6 of the bill, requiring that the Director of the Division of Military Application of Atomic Energy shall be a representative of the armed forces. I supported this amendment which was offered in committee by the gentleman from Ohio [Mr. ELSTON] because I feel very strongly that military application of atomic energy should be under the direction of a person who has given much study and thought to military science and tactics. I sincerely hope and believe that the Director of Military Application of Atomic Energy can and will keep uppermost in mind his responsibility to our Nation in his direction of military application of this superweapon and especially the strategic plan of defenses against its use by any future enemy.

Opponents of my view will argue that the armed forces do not have highly qualified men available to serve as members of the Commission or as Director of Military Application, but I call your attention to page 11 of Senate Report No. 1211, about the middle of the page, as follows:

While the commissioners need not be scientists or technical experts, they must combine clear judgment with imagination and courage, and they must, like the members of the judiciary, be so divorced from private and competing concerns as to give

complete, disinterested, and undivided attention to their tasks.

On that same page the Senate committee recognizes legitimate and important areas of atomic energy development and control touching on the responsibilities of the military departments and they state that—

Throughout the bill, wherever these areas are involved, provision is made for full military participation, and independent activities of the military departments, especially in research and development, are not infringed but expressly encouraged.

In what way could this objective be better achieved than by placing a man qualified in military science and tactics as Director of Military Application?

Some opponents to military membership on the Commission itself will cry out for the elimination of confusion that they claim such membership will create. But I believe I know the Army and Navy well enough to guarantee that the President by judicious selection from the armed forces can find men highly qualified to serve on the Commission and men who will not create confusion in such service. These same opponents of my view would probably predict dire results following the appointment of a member of the armed forces to head any governmental agency dealing with business matters, but a very distinguished constituent of mine, Maj. Gen. Philip B. Fleming, has served with outstanding ability in many important assignments of this kind and is today serving with great credit as Federal Works Administrator. They would also predict chaos and confusion if any member of the armed forces were appointed to an important post in our State Department, and yet I need only call your attention to the distinguished service that is being rendered today by Gen. George C. Marshall in China, by Gen. Douglas MacArthur in Japan, by Lt. Gen. Walter Bedell Smith as Ambassador to Russia, and by Maj. Gen. John H. Hilldring in his recent appointment as Assistant Secretary of State. Where do these critics of the armed forces suggest that we get men better qualified for such assignments than these members of the armed forces? We have a lot of talent today in our Army and Navy and we need them and we must use their talents in various fields of endeavor, but nowhere do we need them more than we do in the field of atomic energy that brings to our Nation the greatest challenge of the ages in the matter of its defense and its very survivorship.

We will rue the day that we blindfold ourselves by disqualifying all members of the armed forces from active, responsible participation in the defense of our Nation against the greatest potential weapon yet known to mankind.

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. MARTIN of Iowa. I yield.

Mr. SHORT. Certainly it is not unfair or unreasonable that one of the members of this five-man commission be appointed from the armed forces of the country.

Mr. MARTIN of Iowa. That is exactly right.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. MARTIN of Iowa. I yield.

Mr. JOHNSON of California. The gentleman might have added a number of admirals who have rendered very distinguished and outstanding service in various civilian posts, including ambassadorships.

Mr. MARTIN of Iowa. Yes, indeed; I did not give a complete list of the Army or the Navy.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. MARTIN of Iowa. I yield.

Mr. VOORHIS of California. Is it not true that these distinguished men the gentleman has pointed out concerning which no one will disagree were all retired at the time of their service in civilian capacities?

Mr. MARTIN of Iowa. Not all were retired. In many instances the gentleman will remember we passed laws which authorized them to serve in such capacity. The special authorization here in question is needed for members of the armed forces who are retired, as well as for those on the active list.

The CHAIRMAN. The time of the gentleman from Iowa has expired.

Mr. MAY. Mr. Chairman, I yield such time as he may desire to the gentleman from Michigan [Mr. SHAFER].

Mr. SHAFER. Mr. Chairman, in reading Senate Report 1211 on the bill for the control of atomic energy, S. 1717, it is interesting to note that in the summary of the testimony which was given before the McMahon committee the members state that—

The peacetime benefits of atomic energy promise to be great, indeed, particularly in medicine, biology, and many branches of research. These benefits are immediate in their promise, but will require extended and unfettered development for full realization.

Note, gentleman, that the testimony indicated that there should be "unfettered development." It was agreed that the principle of atomic energy could be kept secret only temporarily and it was further agreed that legislation should facilitate, as far as possible, "the rapid scientific development of atomic energy, which would promote both the industrial prosperity of the world and the improvement of our instruments of national defense."

S. 1717 is supposed to be the answer to this problem, and in its declaration of policy section 1 of the bill states that the objective shall be "the development and utilization of atomic energy toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace."

Note, especially, that one of the purposes of the bill is to strengthen free competition in private enterprise, and the Senate committee in this connection has explained that to carry out these purposes the bill provides for Government control over atomic energy and for Government programs for information, production, research, and development.

On the one hand, then, is the desire to "strengthen free competition in private enterprise," and, on the other, is the statement that to provide this there must be Government control. But there are controls and controls, and the form that

this control is to take is further explained when it is said that provision is made for Government "production, research, and development." In other words, there is not to be control as we ordinarily think of control. There is to be direct Government ownership and operation. How this is consistent with the expressed desire to strengthen free competition in private enterprise in this all-important field it is difficult to see.

Let us examine the controls that are mentioned. First, the Commission which is to be created is to own all fissionable materials, but it must be remembered that under the definition of fissionable material there would be included ores only if they contain uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials and then only if in such concentration as the Commission may by regulation determine from time to time.

In order to exercise the control that is desired, it is further stipulated that unless authorized by a license issued by the Commission, no person may transfer or deliver, and no person may receive possession of, any source material after removal from its place of deposit in Nature. No license, however, is required for "quantities of source materials which in the opinion of the Commission are unimportant."

This provision is quite vague, for just what does unimportant mean? It is entirely proper that the bill should take into account the possible hazards to national health and safety that the use of these source materials might engender and, from a reading of the Report No. 1211 of the Senate Special Committee on Atomic Energy, this was contemplated. However, because of the vagueness inherent in the word "unimportant," it should, in my estimation, be eliminated. Hence, it is urged that the words "in the opinion of the Commission are unimportant" should be stricken out and there should be substituted for these words "do not constitute hazards to national health and safety."

If this change were made, the vagueness created by the word "unimportant" would be eliminated and this particular control would be limited to definite types of hazards which are interpretable.

There is also vagueness in connection with the provision for the issuance of licenses for source materials. This part of the section reads:

The Commission shall establish such standards for the issuance, refusal, or revocation of licenses as it may deem necessary to assure adequate source materials for production, research, or development activities pursuant to this act or to prevent the use of such materials in a manner inconsistent with the national welfare.

The Commission should be empowered to establish the standards for the issuance of licenses for source materials, but when it is granted the power not to issue licenses in order to "prevent the use of such materials in a manner inconsistent with the national welfare," the Commission is given very wide latitude of interpreting a very vague phrase. It seems

only proper that a bill which contains a provision as important as this should be definite in its language and, consequently, I believe that this phrase should be replaced by "not constituting a hazard to national health and safety."

It is also to be noted that in connection with reporting, the Commission is authorized to issue regulations requiring reports of ownership of source materials but may except from this requirement quantities of source materials which "in the opinion of the Commission are unimportant." Here, again, the word "unimportant" is vague and should be deleted and replaced with the wording "do not constitute hazards to national health and safety."

Further, with respect to source materials, the Commission is—

authorized and directed to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this act.

The words "to the extent it deems necessary" could provide the basis for what might lead to arbitrary use of this power, a use against which the citizens of the United States might be more or less powerless, and therefore these particular words should be deleted and replaced by "upon determination that such action is necessary in the interest of the common defense and security."

But, aside from the control of source materials, the bill in section 4 further provides that—

The Commission shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (a) are useful in the conduct of research and development activities in the fields specified in section 3, and (b) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

It is obvious that the intent of this section is to assure the Commission control over all production of fissionable materials. This is done by making it impossible for fissionable material to be produced in any quantity except in a Government-owned plant. This is further emphasized by the fact that the Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities and it can make contracts with persons, obligating them to produce fissionable materials in facilities owned by the Government.

However, the degree of control which it is desired that the Commission have could well be obtained without making it necessary that all production activities be limited to Government-owned factories. The incentive of private enterprise to produce at the lowest possible cost is lost to the Government when production can be undertaken only under a management contract in a Government-owned plant.

A contractual arrangement such as is envisaged in the bill does not provide the encouragement for the creation and use of new productive methods that are al-

ways being evolved when production of any type is carried on under our normal competitive processes. The committee in its report on acquisition of source materials indicated that it did not intend that the Commission would engage in mining operations in competition with private mining activity and that—

The committee has been alive to the necessity of encouraging the activities of independent prospectors.

The committee has further explained that—

The principle of Government monopoly which the committee has adopted as essential in reference to the production and ownership of fissionable materials is not extended to the ownership, mining or refining of source materials. * * *

Wherever possible, the committee endeavors to reconcile Government monopoly of the production of fissionable material with our traditional free enterprise system. * * * Prospecting for and mining of source materials are at every stage to be encouraged and supported.

It seems to me that just as prospecting for and mining of source materials are to be encouraged and supported, every phase of the nonmilitary development of atomic energy should be similarly encouraged and supported.

Section 1 of S. 1717 has as one of its objectives strengthening free competition in private enterprise, but in section 4 there is no private enterprise and there is no free competition. I appreciate and sympathize with the desires of the framers of the bill to protect the public welfare, but I believe that it is unnecessary and undesirable to have the Commission the exclusive producer of fissionable materials, except where production is incident to research and development activities.

It seems to me that the country would be adequately safeguarded if the Commission were given the authority to regulate and police the production of fissionable material and private ownership or operation were forbidden except under license by the Commission. Then the Commission would have adequate control and I consequently believe that that portion of this section which reads "the Commission shall be the exclusive owner of all facilities for the production of fissionable material other than facilities" should be eliminated and replaced by the following wording:

The Commission is authorized to own and operate facilities for the production of fissionable material. Private ownership or operation is expressly forbidden except under license by the Commission: *Provided, however,* That no license for operation or ownership is required for facilities which (a) are useful in the conduct of research and development activities in the fields specified in section 3, and (b) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

The bill in section 4 also provides for operation of other production facilities when it states that—

Fissionable material may be produced in the conduct of research and development activities and facilities which under para-

graph (1) above, are not required to be owned by the Commission.

Then in paragraph (e) of section 4, under the title of "Manufacture of Production Facilities," it is stipulated that—

Unless authorized by a license issued by the Commission, no person may manufacture, produce, transfer, or acquire any facilities for the production of fissionable material.

In view of the limitations placed on the ownership of production facilities, the definition of the word "facilities" is very important. Turning to section 17, we find that this is defined as "any equipment or device capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission."

It is obvious that a facility capable of such production might not have been originally intended for the production of fissionable material and, therefore, it seems to me that this term is entirely too broad and I recommend that it be modified as follows:

(g) The term "facilities for the production of fissionable material" shall be construed to mean any equipment or device peculiarly adapted for and capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission.

I repeat, gentlemen, that the powers conferred on the Commission and the limitations on production of fissionable material and ownership of production facilities are inconsistent with the avowed purpose of facilitating the rapid scientific development of atomic energy or of "strengthening free competition in private enterprise."

Indeed, this expression of intent is vitiated by the admission that a Government monopoly in the production of fissionable material is being created. And this cannot be reconciled with our traditional free enterprise system.

Instead of facilitating the rapid scientific development of atomic energy the proposals contained in this measure would tend to stifle them—and the free enterprise system with them.

Experience has shown that the forces of free competition do more to aid the rapid development of an art than does any other system. Let us not fool ourselves—this bill will not foster either the development of atomic energy or the free enterprise system. It tends to kill them both and it is not at all necessary, for we can attain all of our objectives of safeguarding the national health and welfare, of facilitating "the rapid scientific development of atomic energy" and "strengthening free competition in private enterprise" if by "controls" we mean not state ownership but controls through proper supervision under an adequate system of licensing. This, I believe, as I have already explained, can be done and should be done.

(Mr. SHAFER asked and was given permission to extend his remarks at this point in the RECORD.)

Mr. MAY. I yield such time as he may desire to the gentleman from Pennsylvania [Mr. Flood].

Mr. FLOOD. Mr. Chairman, the principles and objectives of the McMahon atomic-energy bill should receive the full

and sincere support of the House. The declared purposes of the act incorporate the desired ends of progress, security, and development, as well as international accord. All these demand support and require vigilant and constant guarding of the public interest, but the technical and scientific phases of the problem make it difficult for a full, public understanding of the extent and the far-reaching effects of research and experimentation in the field of nuclear-chain reaction.

The popular concept of atomic energy to the average American is a bomb—a lethal weapon designed to lay cities in ruins, and to blot out lives of thousands of people.

The pictures of the ruins of Hiroshima, of the nuclear clouds rising above Nagasaki, of the scarred hulks in Bikini atoll, have impressed upon the American people the terrific forces which have been harnessed by science. The control of these forces is well established in the statement of powers of the Commission and the committees provided for in the bill known as the McMahon bill. That this control should be lodged in civilian hands with due provision for military advice and counsel is a principle which, in my opinion, is unanswerable and worthy of the unqualified support of the membership of this House, who are the elected representatives of the people.

Adherence to civilian control of atomic energy is demanded, because the interest of every American citizen is involved.

Fundamentally, atomic energy is a new source of power which, according to scientific testimony, is capable of industrial use and application. In fact, the pending bill directs arrangements to such use in section 3 (a). What is the anticipated result? Great basic industries, embracing many sections of this country and employing hundreds of thousands of employees, will be faced with a newcomer in the field of production of power. The great anthracite and bituminous coal industry of Pennsylvania and the tremendous source of electrical energy—all will find themselves face to face with progress. This progress, which may come and if guided and directed in the paths of peace, must march with our existing economic structure. To tear down without consideration our great basic industry of coal would bring national calamity. As a result, the careful guidance, the sound thought, and deliberation which atomic energy and its uses demands should rest in civilian hands.

The bill adequately provides for the necessary safeguards to protect the public. However, in the appointment of representatives to the commission, the General Advisory Committee and the Advisory Boards, mentioned in section 2, I hope that the basic industry of coal will receive representation from its ranks of its management and of its workers. Their interest in any future program or reconversion should receive adequate hearing and competent representation. And what is more, it should be published and broadcast to the American public the fact that this bill is designed not only to give them security but, what is more, to protect them in their economic lives, so that scientific progress as it occurs in the future will not forthwith and

without full determination of its effects, blot out a great basic industry which today is the greatest source of power for the wheels of American production.

I trust that the President of the Senate and the Speaker of this House will in their selections of members for service on the Joint Committee on Atomic Energy, established by section 15 of the House bill, recognize that the people's representatives from the great coal-producing areas of this country deserve representation in the work of the joint committee.

It is a fact that atomic energy demolished great industries and factories in Japan. Let us not have this same great force wipe out the economic structure of great industries in our country without the people and the Congress studying and plotting the change, if any, which may come with the advance of science. None of us know as a certainty what the full force and effect of this new form of energy will be on our way of life in the coal fields. We have never stood in the way of progress, in this matter we probably could not if we wished. But the fact remains that at this early moment I feel it is my duty as a representative of the millions of people of the coal fields to bring to the attention of the proposed Atomic Commission and to the Nation at large, the obligation owed to the coal industry and its people in the great mining area of Luzerne County, Pa., in particular, and the coal-producing areas of our Nation generally. Thought and care and planning must be given to whatever tremendous transition and reconversion problems will follow in the wake of atomic energy harnessed to our economic and industrial life. Where would there be a better place as the center in which to develop this new potential? The livelihood, employment, and welfare of the future generations of these areas is to be affected. Then these generations must be served by and be permitted to give service to any such program. Mr. Speaker, out of an abundance of caution, if for no other reason, I must insist that in this turmoil and concern and grave uncertainty filling the minds of everyone on this subject, the coal-mining areas of the country must not be lost in the shuffle of things to come. I am not an alarmist but I have seen the coal fields forgotten for years and its welfare ignored in all sorts of ways. I am making this statement now to make certain and to serve warning that we are not going to be forgotten again, if it develops that science is going to utilize atomic energy for industrial and commercial energy and power. Proper correlation of and with the coal industry is a vital factor to our national economy.

The force of this new energy may shake the sky as it is developed, I do not know; but I do know that with reference to the anthracite coal area, its patriotic workers and their families and the vast industry which is the backbone of a vast section, "let there be justice though the heavens fall."

(Mr. FLOOD asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I yield 10 minutes to the gentleman from California [Mr. VOORHIS].

Mr. VOORHIS of California. Mr. Chairman, it is quite impossible for me in 10 minutes even to begin the things I should like to have a chance to say on this bill.

I agree that this may well be the most important piece of legislation in the history of our Nation. I wish profoundly we did not have to consider anything of this sort. But I believe we would be derelict in our duty if we did not or if we failed to try our best to grapple with what is admittedly the most perilous problem our Nation has ever faced.

I disagree completely with those who have said that we do not need to pass a bill of this character at the present time. I think we very much do need to pass a bill of this character. With all my heart and soul I wish we did not. With all my heart and soul I wish it were possible to turn back the hands of time and to place atomic energy back in the sun again and in the secrets of the universe whence it came.

But that is not possible. Nor need we expect that the knowledge of the subject in this Nation or in any other part of the world is going to stop where it is now. Much as I should like to encourage Members of the House to continue to comfort themselves and falsely comfort their constituents by talking about the "secret" of the atomic bomb I must honestly say that I believe that to base the security of the United States for more than at most a short span of years upon any such alleged secret is to be guilty of the most dangerous sort of self-deception. Every single bit of scientific evidence, of testimony that has been given on this subject is to the effect first, that all the important fundamental knowledge was given to the world in the Smythe report published by the War Department itself and second that we cannot reasonably expect that other nations will not have such weapons within the course of 5 or 10 years unless something in the nature of dynamic world statesmanship intercedes to stop the whole development of such weapons everywhere. We can, if we will, legislate on the mistaken premise that America's safety will be guarded by the sole possession of certain technological manufacturing methods by scientists in this country. But we cannot legislate to make that situation permanent. It is beyond our power to do so. Our difficult duty in this critical hour is to face facts, startling, world-shaking, profoundly dangerous facts like men and women. Oratory cannot change those facts.

The fact is our choice is between world law and world control over atomic energy on the one hand and an atomic armament race ending in surprise attack and untold suffering and mass destruction on the other. We must have domestic control before we can even talk effectively of world control, let alone achieve it. So, unfortunately, we have to face a much bleaker prospect, a much more complex situation than if we could depend upon the present secrecy of atomic bomb production lasting for more than a brief space of time. So I appeal to those Members whose consideration of this legislation seems so far to be limited to reliance upon the "secret" to recognize now, before it is too late, how far beyond

that tragically oversimplified solution we must go if we are to serve our children's generation and not merely our own next few years. I assure them that if I believed it possible for America to keep some such vital secret and lock it in her military archives to be dedicated to preserving peace, I should go with them with a far lighter heart than beats in my breast at this moment.

One reason we need this bill, in my humble opinion, is the fact that unless a bill of this general character is passed, the development of atomic energy which has proceeded under great difficulty in recent years cannot go forward. The fact is it is not now going forward. I submit that the great majority of the most eminent scientific workers in this field are no longer associated with the project. They have gone to other work. And it is absolutely essential if development in this field is to go forward that those scientists do the work. After all, they are the only people who can. To believe the Army can do it is another dangerous misconception. Indeed, such secrets as do exist today repose in the minds of certain scientists, who, fortunately for us, have chosen to serve America.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield to the gentlewoman from Connecticut.

Mrs. LUCE. The gentleman says that there are no basic scientific secrets on this bomb and I agree with him. There are only manufacturing secrets, but there are some of those.

Mr. VOORHIS of California. Yes; that is right. I believe I said so.

Mrs. LUCE. May I ask the gentleman, if there are no secrets and we are not embarked on an atomic bomb race, what is the urgency, in his opinion, for this legislation?

Mr. VOORHIS of California. That is what I was attempting to explain.

Mrs. LUCE. I did not quite follow the gentleman.

Mr. VOORHIS of California. The fact there are no secrets that we can expect to keep for any appreciable length of time, it seems to me, means more than ever that we are embarking, in essence, upon an atomic armament race at this minute which will continue and become evermore terrible and evermore an influence causing the people of all nations to live under a feeling of suspicion and distrust as time goes on. I am afraid that is the case today. One reason I am afraid it is the case is because I do not believe it is possible, as I stated, for the mind of man to stop either in this country or in any other nation, nor do I believe over a period of time that secrets can be the exclusive possession of any nation.

Mrs. LUCE. I am trying to find out from the gentleman, in view of his statement that this is an atomic-bomb race, whether the gentleman thinks this Commission, if appointed, will make more or less bombs than are being made now?

Mr. VOORHIS of California. I think they will probably make precisely the same number that would be made or not made if the Commission were never appointed. I think that will not make any

difference so far as the number of bombs that are manufactured is concerned. I believe the bill is clear on that and that it lies in a decision to be made by the President. I believe that is where the decision has been made in the past, and I believe that is where it will be made in the future. I think that is where it belongs.

Mrs. LUCE. Why does the gentleman think there is an urgency for this?

Mr. VOORHIS of California. I have, already given one reason. I believe that under present circumstances American development in this field must go on. I wish I did not believe that, but I do. Indeed, it is possible to secure a world control, such as the Baruch report proposes, until we can get the kind of world control that is not dependent upon any treaty but that is dependent only upon a world law of peace and the power of an international agency to inspect and control atomic energy in every nation of the world and prevent any nation from possessing weapons of this sort, precisely as the gentlewoman herself said, until we can get that kind of control I believe that American development has to go on. As I view the world situation at present, I believe American preeminence in this field is one factor which, coupled with the most persistent and relentless work for peace, might give us the leverage to bring about the conditions and the enforceable disarmament which could make true peace possible.

But I do not believe American development is or can go on successfully under present circumstances. I think it necessary that some form of civilian commission of this sort be created together with attendant changes in the circumstances under which the work will be done if we are to get the kind of scientific progress which I believe under present circumstances is necessary to our country's safety and to the hope of future peace.

Mrs. LUCE. I agree with the gentleman on that particular need for the Commission.

Mr. VOORHIS of California. My second reason for believing it necessary is that if we are to hope for such international control as I just attempted to briefly describe, and I believe that to be the only hope of safety for the population of the United States in the future, if we are to hope for any such international control, we will have to first establish in the United States an effective control over atomic energy within our own borders. We do not have it now. There is nothing in present law to prevent any Tom, Dick, or Harry from possessing fissionable material, manufacturing miniature bombs with it, or exporting it out of the country. We are in a situation comparable to that of a bunch of children playing with TNT, and I may as well point out now the added danger that some individual could under present law seek a patent on atomic energy itself, in which case, under our patent laws he would have to present for public inspection at the Patent Office a description of his process and the United States would have to go to a public trial to protect whatever rights it may have or to attempt to protect its secrets. Surely those who, like myself, do not want to

give away our present advantage do not really want such a condition. Unless we have the type of control this bill provides there is every likelihood that the very circumstances which some of the opponents say they are trying to prevent, namely, the general dissemination of dangerous information, and indeed dangerous devices may well take place. You may get all sorts of development here and there of a purely sporadic nature, and none of us has any possible means of predicting what the result might be.

So that my second reason is this. I believe I have at least an inkling of what atomic energy is. I confront it with feelings of mingled awe and a sense of almost oppressive responsibility. For it is the energy of the sun itself, the fundamental energy of the universe, by far the most tremendous gift of God that mankind has ever presumed to take from His natural storehouse. Atomic energy is by infinite measure the most destructive force ever loosed on this earth. And not only do I know it will be our destruction unless moral and, indeed, religious and spiritual forces of corresponding strength are awakened throughout the world to meet it, but I also believe pending that time it must be controlled if mankind is to survive and to preserve any real vestige of his civilization on this planet.

Mrs. DOUGLAS of California. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield to the gentlewoman from California.

Mrs. DOUGLAS of California. I would just like to say this as another reason why the bill should be passed now. We must proceed with our basic scientific research, which is our greatest protection in the future, and, just as the gentleman said, if we do not have the knowledge, if we stay where we are in science, we will lag behind. We must keep our pre-eminent position in science in the world.

Mr. VOORHIS of California. That is right. I thank my colleague.

Mrs. DOUGLAS of California. And the way we can do that is by making advances in the basic sciences. The scientists are leaving these projects now because there is no set program, and we cannot make these scientific basic discoveries under military control. That is the crux of it. The statements made that the military is thrown out of this program is utter balderdash and nonsense.

Mr. VOORHIS of California. I think the military is not thrown out of it at all. On the contrary; I think our military needs are met in the bill or I would not support the bill.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield to the gentleman from New Jersey.

Mr. THOMAS of New Jersey. Does the gentleman believe that this is a very important bill?

Mr. VOORHIS of California. I certainly do.

Mr. THOMAS of New Jersey. Then does not the gentleman think that in view of its importance, in view of the fact that we only had 2 days of hearings before the Committee on Military Affairs, and in view of the fact it is coming up

in the last few days of this session of Congress, that we should delay it a little bit until we really understand what is in the bill?

Mr. VOORHIS of California. I believe this, I will say to the gentleman: I believe that every moment is precious. I believe that every moment that America still retains preeminence in this field is precious for the future chance of life of the peoples of the world. I ask the gentleman to consider what the situation would be if some great dictatorships stood in our position today. It is only so long as America is preeminent that we stand a halfway good chance of gaining the controls for peace which are our only hope, and since I believe domestic controls must precede international ones I believe there is the greatest urgency about this legislation.

The CHAIRMAN. The time of the gentleman from California has expired.

Mr. MAY. Mr. Chairman, I yield the gentleman two additional minutes.

Mr. VOORHIS of California. Only so long as America does retain that position is America's position half as strong as it needs to be in trying to bring, from her real desire to seek peace, the rest of the nations of the world into a position where world control over this awesome thing can be established.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield to the gentleman from Kentucky.

Mr. MAY. I would like to say to my colleague on the other side of the aisle that the statement that we only had 2 days of hearings on this legislation is not justified. We had weeks and weeks of hearings, and the gentleman from California testified before the committee at that time.

Mr. VOORHIS of California. That is true.

Mr. THOMAS of New Jersey. Mr. Chairman, if the gentleman will yield, that was an entirely different bill.

Mr. MAY. That was on the subject of atomic energy; the May-Johnson bill.

Mr. VOORHIS of California. This bill in the Senate of the United States was considered for months by a committee, whose membership the gentleman from Texas read to the House the other night, than which there could be no more distinguished or more essentially conservative membership selected in that august body, and it seems to me that the House ought to have some regard for the basic work that was done there and for the legislation that was written.

Mr. THOMASON. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield to the gentleman from Texas.

Mr. THOMASON. More than that. Three or four volumes of testimony before this special Senate committee were printed, and every Member of the House was provided with a copy of those hearings.

Mr. VOORHIS of California. Indeed, that is true.

May I say, Mr. Chairman, that the provision in the bill which provides that atomic energy, the very energy of the sun itself, the energy developed at an expenditure of \$2,000,000,000 of the tax-

payers' money of the United States, shall not be capable of being privately patented or monopolized by some one corporation in this Nation—to say that, seems to me to be the very essence of statesmanship and the very essence of the protection of a free-enterprise system. I hope Members will consider the alternative to some of the patent provisions of this bill. That alternative is to say that atomic energy can be patented. Do you really believe that should be possible? That some private agency should be able to call this great national development, paid for by all the people, its own private domain? Do you want to expose it to the possibility of an international private cartel controlling it? Remember this thing is capable of becoming not only the overwhelming military weapon which it has been proven but possibly also the overriding economic power in our whole Nation, a power great enough to transform the whole pattern of all our production. I ask you, should that be the exclusive property of any one individual or corporation? Do you propose to let the basic energy of the sun be patented? Would such action promote free enterprise? What, may I ask, becomes of little business then? What, finally, becomes of the people who paid for all this and gave their sons in the war in addition? I wonder what would happen, indeed, if atomic energy did become the private preserve, if you will, of some private agency? I, for one, am willing to take my stand against letting it become the private preserve of any single agency.

Last of all, Mr. Chairman, let me point out with emphasis that this legislation can be changed by any Congress that sees fit. It is designed to carry us through what I do not hesitate in saying will probably be the most difficult adjustment period mankind has ever experienced.

Fondly do we all hope that the day may come when mankind will have learned as it certainly has not yet learned to live safely with atomic energy. As that day is approached the admittedly unprecedented provisions of this bill can be changed. But for today we need it. Our country needs it. The world needs it. The fact that I wish these things were not so cannot be allowed to affect my judgment as to what I must do in supporting the bill.

Mr. SHORT. Mr. Chairman, it is very regrettable that there are not more Members on the floor at this time, because I believe there is not a member of our House Committee on Military Affairs or of this body itself who knows more about the pending legislation than the very able lawyer and distinguished gentleman from Ohio [Mr. ELSTON], to whom I now yield 15 minutes.

Mr. ELSTON. Mr. Chairman, first of all I wish to thank the gentleman from Missouri for his very much undeserved compliment.

Mr. Chairman, as I have heretofore said, this bill is both dangerous and unnecessary. It is dangerous because it sets up a Government bureau with more power and authority than has ever been granted before. This bureau, under the provisions of the bill as now written, would have life and death control over the industry of the Nation whenever we

reach the place where atomic energy may become useful for industrial purposes, in fact, even before that time. Moreover, the armed forces would become subservient to this power even in matters of national defense so far as the use of atomic energy is concerned. Furthermore, it removes incentives provided by our patent laws to inventors, and adopts a patent system found only in Soviet Russia. The fact that the Constitution of the United States gives to every inventor the exclusive right to his discoveries has meant nothing to the proponents of this legislation for under the provisions of this bill patents relating to the use of atomic power are either revoked or become the property of the Government.

Although the measure relates to the use of atomic power for military as well as civilian purposes, every conceivable effort has been made to eliminate representatives of the armed forces from representation on that all powerful bureau known as the Atomic Energy Commission. In its introductory section this bill is presented to us through a series of misrepresentations. For example, section 1 provides that it is "declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace."

If enacted into law this bill would do exactly the reverse of these things. If the paramount objective is to assure the common defense and security, why has so desperate an effort been made to completely eliminate the armed forces from representation on the Commission or in any department under the supervision of the Commission? Even though the bill purports to deal with atomic weapons and national defense, every attempt to give the Army and the Navy some representation has been resisted to the utmost. The House Committee on Military Affairs was bitterly assailed by the supporters of the bill generally because it dared to amend the act as it came from the Senate so as to provide that at least one member of the Commission and the head of the Division of Military Application should be from the armed forces. The only argument I have heard against it is the rather specious claim that it is not in keeping with our traditions for a military man to serve on a policy-making commission—that military men are only interested in war, and that other nations might frown upon their presence on the Commission. In this connection I wonder why the civil functions of the War Department are so conveniently forgotten. If there has been any Government agency that has been free from criticism and that has been elevated above the run-of-mine Washington bureau, it has been the Corps of Army Engineers which has for so many years been responsible for our rivers and harbors and flood-control projects. In this work they have handled billions of dollars and have performed work in no way related to war.

Yet I have never heard that it was not in keeping with American tradition for them to exercise these functions.

Mr. Chairman, I have heard a lot of statements today about this legislation. I think everybody agrees on one thing, that there is a lot of confusion about it.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I shall be glad to yield to the gentlewoman from Connecticut.

Mrs. LUCE. Is it not rather a little more correct to say we are not confused about the legislation. We understand it rather clearly. What we are confused about is what to do about it.

Mr. ELSTON. That may be but I for one am not willing to turn this Nation into a totalitarian state merely because there may be some confusion about proposed legislation. Since some speakers today have indicated that they are for the legislation solely for security reasons, I would say that is all the more reason why things should remain as they are. I am not willing to substitute a politically minded bureau, such as this bill would set up, for trained military personnel, so long as we are in any danger.

Miss SUMNER of Illinois. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I am pleased to yield to the gentlewoman from Illinois.

Miss SUMNER of Illinois. If there were a civilian commission they would be subject to penalties, but you could not court martial them the way you could the military officials, could you?

Mr. ELSTON. Civilians, of course, would not be subject to court martial.

They say that if the Army is represented on the Commission this country might go ahead and manufacture atomic bombs and atomic weapons. The answer to that I believe is that any time the President of the United States wants the manufacture of atomic bombs to cease all he has to do is to give a simple order to stop.

You will no doubt hear it loudly proclaimed that the armed services have been taken care of in the Senate bill by providing for a military liaison committee. Read the section creating this committee and you will see that it has been given no authority whatsoever. Aside from the fact that the Atomic Energy Commission shall consult with the liaison committee, and that they shall keep each other informed as to atomic energy matters in the War and Navy Departments, the liaison committee has nothing to do. Actually nothing is provided for in this section that could not and should not be done between any government departments as a matter of simple courtesy and expediency. Since the Commission must deal with matters of national defense, I do not know how it could function without consultation with the War and Navy Departments. The appeals which the services are permitted to make to the Secretaries of War and Navy, and through them to the President, would be permitted without this legislation. In a word, this section is nothing more or less than a sop handed out to convey the erroneous impression that our armed forces are given some recognition. Even this was denied in the beginning

despite the fact that the atomic bomb was developed under the supervision of the Army and all secrets in connection therewith are in its custody.

Before we look into the powers of the Commission and the extent to which it encroaches upon private industry and interferes with our American way of life, you will note that section 9 requires the Army to transfer to the Commission forthwith upon the passage of the bill, all facilities, equipment, and material devoted to atomic energy, research, and development. This would include even the Oakridge plant, together with any bombs now in existence, as well as formulas and secrets in connection with the atomic bomb and other atomic weapons. So at the start, even before the war is officially over, the branches of the services charged under the Constitution with the defense of the Nation are required to turn over to a civilian Government bureau of political appointees weapons which the services may require for the defense of the country. If this does not jeopardize the security of the Nation, then the Bikini tests and the results at Hiroshima and Nagasaki were incorrectly reported.

So much for security. As to other powers of the Commission, let us examine a few of them. In the field of research the Commission may make grants-in-aid and loans to public or private institutions or persons even in connection with research for industrial purposes. Thus the Commission has the power to favor one school or university as against another, and to favor industries, companies, or individuals to the detriment of others. As no person or company would have the right to engage in research on their own part, you perhaps begin to appreciate what is meant by the term "life-and-death control of industry."

Mr. SHORT. Mr. Chairman, if the gentleman will yield, may I say that that is why some of the college professors are so strong for this legislation.

Mr. ELSTON. I guess there is little doubt of it.

Mr. SMITH of Ohio. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield to the gentleman from Ohio.

Mr. SMITH of Ohio. I can not understand this talk about giving this secret away. We have never done anything like that before. We have kept our military secrets to ourselves. Who are these people who want to share this secret with the world and what are they doing it for? That is the thing I can not understand at all.

Mr. ELSTON. I have an idea who some of them are.

Bear in mind, Mr. Chairman, that the Commission will become the owner of all fissionable material regardless of who may now possess it. It can be parcelled out for industrial purposes only with the consent of the Commission. As the time may come when atomic energy power may supplant many other forms of power, and become vital to every industry in the Nation, it is not difficult to understand the extent to which the Atomic

Commission would control the industries of the country.

If any person, industry or company should be dissatisfied with the distribution or refusal of the Commission to distribute any fissionable or by-product materials, such person or company may obtain a review of the determination of the Commission by an appeal. But let us examine into the type of appeal afforded. On a matter as important as this, one would feel the appeal should be to the courts, or at least to an unbiased or disinterested tribunal of some sort. Such is not the case, however. Section 5 (d) (2) makes the Commission the judge, jury, and executioner so far as appeals under this section are concerned. The Board of Appeals created by this section shall consist of three members who shall be appointed by the Commission. Should any person feel himself aggrieved by a decision of the Board of Appeals his only further appeal is to the Commission itself. Even this right is not guaranteed as it is provided that "the Commission may in its discretion review and revise any decision of such board of appeal." Here, I submit we see bureaucracy at its worst.

Mr. COLE of Missouri. That sounds just like the OPA.

Mr. ELSTON. Well the OPA never asked for anything more than that. And if there was ever anything that is the fulfillment of a bureaucrat's dream, I think it is this section.

Mr. DURHAM. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I am glad to yield to my distinguished friend from North Carolina.

Mr. DURHAM. The gentleman certainly would not be in favor of exporting this material to some foreign country?

Mr. ELSTON. I certainly would not.

Mr. DURHAM. Well, at the present time that could happen if we allow the matter to run loose as it is at the present time. Any country could import this material into their country from the United States.

Mr. ELSTON. No. I am sure we have ample authority today to regulate exports and imports of dangerous commodities.

Mr. HANCOCK. Under the existing law, has the Army the power to monopolize the sources of materials and real estate containing deposits of such materials? Is there any such authority under present law?

Mr. ELSTON. The Army might have that authority in time of war under war power acts.

Mr. JENNINGS. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield.

Mr. JENNINGS. Does not the Government have power to condemn any property it may need, under the general law?

Mr. ELSTON. Yes. The Government has the power to condemn anything it needs for a public purpose.

Mrs. ROGERS of Massachusetts. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield.

Mrs. ROGERS of Massachusetts. It seems to me it would give that group tremendous power over other groups. I am

thinking even in terms of internal disorder and strife and conflict in our own country. That is one reason I would like to have the Army in it. That would not happen if the Army was in it.

Mr. ELSTON. I do not think it would either.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield.

Mr. VOORHIS of California. I would like to ask the gentleman what he feels should be done, under the circumstances he alluded to himself, namely, that if some development in the field of atomic energy were made which rendered all development of power obsolete, whether he would not believe that should that happen it would be most important that some provision be made somewhere so as to assure that some such development as that could be available to be used on an equitable basis by all competent users in the country.

Mr. ELSTON. Well, I would want to wait until that happened and then regulate it.

On the question of the appeal procedure I was discussing, it may be contended that the Administrative Procedure Act would apply, but since that act makes an exception in cases where agency action is by law committed to agency discretion, the Administrative Procedure Act could not be invoked in view of the section to which I have just referred. In an effort to make the Administrative Procedure Act apply to this bill, I offered an amendment in committee to the effect that it shall apply to this act, but since the appeal section contained in section 5 still remains in the bill, it would no doubt be construed to be an exception.

One of the most objectionable features of this bill is section 7, which contains the licensing provisions. Under this section it shall be unlawful for any person to manufacture, produce, or export any equipment or device utilizing fissionable material or to utilize atomic energy except under and in accordance with a license issued by the Commission. Do not be misled by subsection (b) which requires a report to Congress before such licenses may be issued. If you will examine that section you will find that there is but one report to be made to Congress. That report will be made when, in the opinion of the Commission, any industrial, commercial, or other nonmilitary use of atomic energy has been sufficiently developed to be of practical value. In that report the Commission will set forth all the facts with respect to such use, and the report will contain the Commission's estimate of the social, political, economic, and international effects of such use. After ninety days subsequent to the making of such report, the Commission will have unlimited authority to issue licenses for the utilization of atomic energy to such persons and on such terms as it sees fit.

Mr. McDONOUGH. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield.

Mr. McDONOUGH. After the report is made, what happens? Is it merely an informative reports? Does the bill fur-

ther say that the Congress shall say "Yes" or "No"?

Mr. ELSTON. They simply file a report with us whether or not the Congress wants to enact supplemental legislation. If we want to enact supplemental legislation at any time, we do not have to wait for a report from any bureau.

Mr. DOYLE. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield.

Mr. DOYLE. Would you not want the Commission to give a full report to Congress on every phase of the subject?

Mr. ELSTON. Certainly, I would want them to report, but I am pointing out that this section is meaningless as far as the issuance of licenses is concerned.

Mr. DOYLE. If you want a full report, should it not cover the economic phase of the proposal?

Mr. ELSTON. I am pointing out the misleading language of the section and the effort to convey the impression that before licenses may be issued in any case the Commission must report to the Congress.

When we reach section 10 of the bill we see unfolded a strange philosophy for America. Let me read the pertinent part of this section:

It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy, the Commission shall be guided by the following principles:

(1) That information with respect to the use of atomic energy for industrial purposes should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established.

In other words, hereafter it shall be the policy of this country, as soon as international safeguards have been established, to share the use of atomic energy secrets and power with the other Nations of the world. When in all the history of this Nation has it been required that anything developed for the benefit of American industry shall be shared with other Nations? American industry leads the world today because of American inventive genius and our free enterprise system, but now we have a new philosophy. Do not lose sight of the fact that this sharing plan pertains to the use of atomic energy for industrial purposes only. It has no relation to the outlawing of atomic energy for military purposes which, I am sure, every thinking person favors when it can be done without endangering our own security. Judge for yourselves what this international plan will mean to American industry.

Not only must we share such information with other nations, but we must make sure they get the information. Section 10 (b) authorizes the Commission to establish such information services, publications and even libraries, as it sees fit. These may be established anywhere in the world. I know, of course, that someone will say that this sharing of information must be on a reciprocal basis, but who determines what shall be

reciprocated? The Commission, of course. Since we apparently have all the information regarding atomic energy, what are we to get in return? Perhaps good will. So far as this section is concerned, the Commission would have authority to exchange atomic secrets for industrial purposes for good will as the Commission is the sole judge.

The patent section of the bill is definitely unconstitutional in its present form. Article I, section 8, clause 8, of the Constitution provides—

The Congress shall have * * * power to promote the program of science and useful arts by securing for limited times for authors and inventors the exclusive right to their respective writings and discoveries.

This section has been interpreted on many occasions by the courts, and the leading decisions on the subject are set forth in the minority views which accompanied this bill. For example, it is said in *Solomons v. United States* (137 U. S. 342, 346), that—

The Government has no more power to appropriate a man's property invested in a patent than it has to take his property invested in real estate.

The only testimony presented to our committee on the subject of patents came from Mr. Conder C. Henry, formerly Assistant Commissioner of Patents. He said, and I quote:

By removing the incentives provided by our patent laws, the bill is a radical departure from anything known in our history. The only parallel I can find to it is the Soviet patent law.

He further stated that hundreds of inventions used at Oak Ridge and elsewhere in the development of the atomic bomb had previously been made by private inventors. Moreover, he pointed out that under our present patent system the interests of the Government were fully safeguarded without encroaching upon the constitutional rights of any person. This same system should and can continue, and it is my purpose to offer, as I did in committee, an amendment to strike section 11 from the bill.

Section 15 of the act creates a new congressional committee with full legislative authority, and this comes at a time when Congress is recommending fewer committees—even a consolidation of the Military and Naval Committees.

In the enforcement provisions of the act the Commission is given the broad power to make regulations and orders and enforce them by punishing offenders with a fine as high as \$20,000 and imprisonment for not more than 20 years, or both. This section, I believe, violates the rule laid down by the Supreme Court of the United States in the case of *Schechter v. United States* (295 U. S. 495), wherein it was held that Congress cannot delegate to any Government agency the power to make regulations having the force of law without laying down the policies and establishing the appropriate standards.

The CHAIRMAN. The time of the gentleman from Ohio has expired.

Mr. SHORT. Mr. Chairman, I yield the gentleman from Ohio five additional minutes.

Mrs. LUCE. Mr. Chairman, will the gentleman yield for a question?

Mr. ELSTON. I yield.

Mrs. LUCE. There being very few available sources of thorium, plutonium, uranium, and so on out of which fissionable material can be got, would the gentleman also think that the world authority which would own all those materials could take our large supplies and divide them up at will?

Mr. ELSTON. I presume that might be done if we became a part of that world authority.

Mrs. LUCE. Would it be possible?

Mr. ELSTON. It would not be possible to distribute fissionable material outside the United States at this time, but subsequent international agreements could make it possible.

Mr. McDONOUGH. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield.

Mr. McDONOUGH. With regard to the deposits of this radioactive material, certainly the commission would have control of such materials within the boundaries of the United States but would it control deposits in other parts of the world?

Mr. ELSTON. No; but it could acquire them.

The CHAIRMAN. The time of the gentleman from Ohio has again expired.

Mr. MAY. Mr. Chairman, I yield 2 minutes to the gentleman from Ohio.

Mr. SHORT. Mr. Chairman, I yield 2 minutes to the gentleman from Ohio.

The CHAIRMAN. The gentleman from Ohio is recognized for four additional minutes.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield.

Mrs. LUCE. The gentleman spoke of the section called "Control of Information" in which there is formed a bureau to disseminate information. Would he care to comment on what type of information this \$10,000,000,000 or \$20,000,000,000 corporation might disseminate to the people of America?

Mr. ELSTON. There would be no limitation on it, because the section I referred to authorized and directed the commission to establish such information service as it saw fit; in other words, it would be within the discretion of the commission to decide on the type and extent of information services, the number of libraries, and so forth.

Mr. DURHAM. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I yield to the gentleman for a question.

Mr. DURHAM. Does not the gentleman think that if the commission did the things he points out they would be subject to the Espionage Act?

Mr. ELSTON. If the terms of the Espionage Act were violated.

Why do they say this legislation is needed? The principal claim is that it will impress the rest of the world that we have taken the matter out of the hands of the military and invested it with civilians. If that be the purpose, this legislation very definitely is not needed as the President can order the military authorities to cease any of their military activities at any time, including the

manufacture of atomic bombs or the use of atomic energy in any way.

Another claim is that peace of the world requires international control of atomic energy. If that be so point out a single thing in this bill dealing with international control or in any manner related to it. International control can come about only by international agreement. If any legislation is needed to augment such an agreement it necessarily would come after the international agreement was entered into.

Do we need this legislation to begin negotiations for such an agreement? The best answer is—such negotiations have begun before the duly constituted United Nations Atomic Energy Commission. Mr. Baruch submitted a proposal to this Commission a month ago. But it takes two or more to enter into an agreement, and Russia has flatly rejected Mr. Baruch's plan. Not only has she rejected it, but she has submitted a counterproposal which never could be agreed to if we have any regard at all for the security of this country.

So if we do not need this bill to remove an impression that we are militaristically inclined and we do not need it for the purpose of helping to bring about international control of atomic energy, what do we need it for? If it seeks to do anything further than to place shackles on American industry and barriers against inventive genius and ingenuity such purpose does not appear from the language of the bill.

If this Nation is concerned lest the other nations of the world think we are assuming too much of a military attitude we perhaps should explain why we are spending hundreds of millions of dollars in proceeding with the Bikini tests. Is it consistent to carry on these demonstrations and at the same time try to fool the American people into believing we can pacify the world by creating another bureau and many expensive bureaucrats to further regiment the lives of our people and further encroach upon their liberties?

If this measure were to stop with encroachment upon American freedom it would be bad enough, but not necessarily fatal, as such an invasion might be corrected by subsequent legislation, although I have found that liberty and freedom, once surrendered, are not easy to regain. There is always another emergency offered as an excuse for retaining them. On the other hand, if the security of the country is involved legislation might be helpless to correct the error.

As I see it, the bill before us today, if enacted into law, will definitely jeopardize the Nation's security. At the moment the secrets of the atomic bomb and the bomb itself are safely in the hands of the military authorities in the keeping of that branch of the Government charged by the Constitution with the responsibility of defending the Nation. That is where I submit it should remain until our safety is assured under international agreements actually entered into and until machinery has been set up in the world adequate to enforce such agreements.

(Mr. ELSTON and Mr. VOORHIS of California asked and were given per-

mission to revise and extend their remarks.)

Mr. MAY. Mr. Chairman, I would like to make a very brief statement for the information of the membership. Two very distinguished Members of this body are resigning this afternoon and taking their seats on the judiciary of the country. They would like a little time in which to say good-by to us. I hope that when I move that the Committee rise, all gentlemen present will retain their seats until we listen to our colleagues. The ceremonies will be very brief.

Mr. Chairman, I move that the Committee do now rise.

The motion was agreed to.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr. JOHN J. DELANEY, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (S. 1717) for the development and control of atomic energy, had come to no resolution thereon.

RESIGNATIONS FROM THE HOUSE OF REPRESENTATIVES

The SPEAKER laid before the House the following communications:

JULY 17, 1946.

HON. SAM RAYBURN,
Speaker, United States House of Representatives, Washington, D. C.

DEAR MR. SPEAKER: I beg leave to inform you that I have this day transmitted to the Governor of Texas my resignation as a Representative in the Congress of the United States from the Sixth Congressional District of Texas, effective from this date.

Cordially yours,

LUTHER A. JOHNSON.

JULY 17, 1946.

HON. SAM RAYBURN,
Speaker of the House of Representatives, Washington, D. C.

DEAR SIR: I beg leave to inform you that I have this day transmitted to the Governor of Pennsylvania my resignation as a Representative in the Congress of the United States from the Tenth District of Pennsylvania.

Cordially yours,

JOHN W. MURPHY.

The SPEAKER. The Chair recognizes the gentleman from Texas [Mr. LUTHER A. JOHNSON].

Mr. LUTHER A. JOHNSON. Mr. Speaker, today I am resigning from the House to become a judge of The Tax Court of the United States to which I have been appointed by President Truman and confirmed by the Senate.

For more than 23 years I have had the honor to serve continuously as the Representative of the Sixth Congressional District of Texas, having first been elected in November 1922 to the Sixty-eighth Congress, and my first term began on March 4, 1923, that being the beginning date of the new Congress at that time, but since the adoption of the twenty-first amendment to the Federal Constitution the terms of Representatives in Congress begin now on January 3.

In serving my relations as a Member of Congress, I wish to express my appreciation of the many courtesies and kindnesses that have been extended to me throughout the years by my colleagues

and the leaders of the House, for whom I shall always have an affectionate regard.

Also, in taking leave of this body, I would like to say a few words in defense of Congress as an institution. My service here of almost a quarter of a century should qualify me to know what Congress is and how it works.

A few years ago I delivered in this chamber a memorial address honoring some of our departed Members, in which I alluded to this subject, and I wish to repeat a few of the observations which I made at that time.

Contrary to the popular belief, membership in Congress requires constant labor. The manifold duties here require not only unremitting toil but deep thought, often vexatious worry, and this has been true at all times, but especially so during the grave crisis through which our country has been passing during the past decade.

Some years ago a well-known writer and prominent businessman was elected to membership in the House, and after serving a short time and familiarizing himself with the duties here and becoming acquainted with his colleagues, wrote an article for a current magazine entitled "What Surprised Me About Congress," in which he described his disillusionment as to the ability of Congressmen and the amount of work which they do. His conclusion was that, viewing Congress from the inside, he was surprised to find how hard they worked, how much they knew, and the conscientious manner in which they discharged their obligations.

If the American people could see Congress at close range, and follow them daily, they would reach the same conclusion as did the distinguished author of that article.

The Congress of the United States epitomizes and expresses as no other body possibly can the genuine spirit and the profound emotion of American life. To be chosen out of a population of 140,000,000 people to be the Representatives of their constituents in the National law-making body is an honor.

Critics may speak in disparagement of our National law-making body, but the history of our Government reveals that, by and large, the type of men who have served here excel in character and ability the same number of men in any other similar group.

The membership of Congress, representing as it does divergent views and faiths, both political and religious, and coming from those of wealth and those of poverty, might be compared to a great mosaic, reflecting a true cross-section of the American people.

It has always been a popular pastime to ridicule any legislative body, and Congress has often been made the subject of gibe and criticism, but not only the quality of its membership but the importance of the work which Congress performs is a complete answer to those who scoff.

If some foolish and fantastic decision should ever be made that one of the three coordinate branches of the Government should be abolished, the legislative, if a democracy is to survive, would be the last

to go. Whatever else may be said about the Congress of the United States, with all its faults and its foibles, it is the palladium of our liberty, and when Congress falls the Republic will die.

I love the Congress of the United States where I have spent a large portion of my life in serving my country, and I want to see it continued on the same high plane that it has always occupied in the past.

Now that I am to be no longer a part of this body, and will never again be a candidate for an elective office of any kind and my motives cannot be impugned as actuated by self-interest, I wish to repeat and reemphasize what I have often said in the past as to the value of longevity of service in Congress. The Member who comes here expecting to serve only a short time, and serves only a short time, cannot do justice to himself, his constituents and his country. Service in Congress, to be at its best, should be in the nature of a career and not merely temporary. Seniority may have its abuses and objections, but it is necessary to encourage and require length of service, which is highly desirable for the country's good. The States whose delegations have served longest here always take highest rank, and rightly so. The delegation from my own State of Texas has always been outstanding, and one of the reasons has been that our State has retained its Congressmen on the average for a greater length of time than many of the other States; four of our delegations have served longer than I.

Of course, the question of ability is involved, and that should be one of the first matters of consideration in choosing a Congressman, but when a Congressman has ability, character and devotion to duty, his constituents should keep him in Congress as long as he will serve.

While I shall not be here to vote when the measure comes up, I hope that this House will pass the reorganization bill to increase the compensation of Congressmen and create a retirement fund for Congressmen. The passage of this legislation will be an act of justice. Soon after I became a Member of Congress, more than 20 years ago, I voted to increase the salaries of Congressmen from \$7,500 to \$10,000 per annum, and the newspapers in Texas carried a headline, "Three Texas Congressmen vote to increase their salary"; but never did I have a word of criticism from any of my constituents for this vote.

Congress has passed legislation providing for retirement compensation to nearly everyone in the Government except themselves. Surely the Members of Congress are entitled to the same privileges and benefits that other servants of the Government receive, and I trust that Congress does justice to itself and to the country by passing shortly an adequate system of congressional retirement. Nothing would so instill courage into the Members of the Congress as the knowledge that when they retire after long years of service they would not become objects of charity.

You will please pardon me for giving you this gratuitous advice, which I seldom do, for I am a good deal like a friend of mine who said he never gave

advice, first, because it was seldom appreciated, and, second, because it was never followed.

I shall not detain you longer, for I know how busy you are in trying to complete the program of the House so adjournment can be had the latter part of this month, but I did not want to take leave of my colleagues without these few words of farewell. I have enjoyed my service here and shall always treasure in my heart the friendships which I have made on both sides of the aisle.

The SPEAKER. The Chair recognizes the gentleman from Pennsylvania [Mr. MURPHY].

Mr. MURPHY. Mr. Speaker, I want to endorse fully and subscribe to the thoughts outlined by my distinguished predecessor, the gentleman from Texas [Mr. LUTHER A. JOHNSON], soon to be Judge JOHNSON, of Texas. I have not been here as long as my distinguished friend. I have been here but 4 years. I left a busy, active trial practice back home to come to Congress. But in the 4 years I have been here I have made many strong friends and lasting friendships that I shall love and revere all my life. It has been a great privilege and a high honor to have worked with and under the distinguished Speaker of the House, the gentleman from Texas, SAM RAYBURN. I think he is a great American. From the day I attended my first Democratic caucus when I had made my little speech and received a word of praise from our distinguished leader, the gentleman from Massachusetts [Mr. McCORMACK], he has been my adviser and friend ever since and shall be for the rest of my life. He, too, is a great American.

I have enjoyed meeting the Members on the Democratic side and on the Republican side.

I have enjoyed close personal friendship with those on the Republican side. I do not think I have ever passed the distinguished minority leader, the gentleman from Massachusetts [Mr. MARTIN], without having a fine, friendly "Hello" from him. I have worked with Members of the House on 11 committees.

In recent days on the Pearl Harbor Committee I have worked night and day with my good friend, the distinguished gentleman from Wisconsin [Mr. KEEFE], the distinguished gentleman from California [Mr. GEARHART], as well as the members on that great committee from the Democratic side of the House, the distinguished gentleman from Tennessee [Mr. COOPER], and the distinguished gentleman from North Carolina [Mr. CLARK]. So, too, I have had the pleasure of working with members of the Senate, the distinguished majority leader, Senator BARKLEY, from Kentucky, the distinguished gentleman from Georgia, Senator GEORGE, the distinguished gentleman from Illinois, Senator LUCAS, the distinguished gentleman from Michigan, Senator FERGUSON, and the distinguished gentleman from Maine, Senator BREWSTER.

I think Congress is a great institution. I think Congressmen should be returned by their constituents because after 4 years of hard, diligent labor here I feel I have begun to realize what this institu-

DIGEST OF CONGRESSIONAL PROCEEDINGS OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF BUDGET AND FINANCE

Legislative Reports and Service Section
(For Department staff only)

Issued July 19, 1946
For actions of July 18, 1946
79th-2nd, No. 141

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HIGHLIGHTS: House concurred in Senate amendment to bill extending Sugar Act for one year. House Rules Committee cleared bill to give FWA additional power over construction and operation of public buildings; companion bill reported in Senate. House Rules Committee cleared proposed Foreign Service Act. Senate insisted on amendment to strike out Elliott rider prohibiting NLRB actions regarding packing-canning employees; bill returned to conference. Senate committee reported measure to authorize alcohol plants to produce sugars and sirups until Dec. 31, 1947, and to postpone disposal of certain alcohol and rubber plants. Sen. Wherry said we are getting larger meat supplies at reasonable prices. Rep. Hoeven charged Government "funbling and fiddling" in farm-machinery shortage.

SENATE

- LABOR-FEDERAL SECURITY APPROPRIATION BILL.** Agreed to the conference report reporting in disagreement the Elliott amendment prohibiting NLRB actions with respect to packing-canning employees, further insisted on the Senate amendment striking out the Elliott provision, and appointed conferees for a further conference (pp. 9422-3). Conferees were also appointed in the House (p. 9515).
- PRICE CONTROL.** Sen. Wiley, Wis., recommended that OPA remain "dead" to permit a "breathing spell" (pp. 9427-8).
Sen. Wherry, Nebr., discussed prices of meat and other commodities and said we are getting larger supplies at reasonable prices (pp. 9429-32).
- WOMEN'S RIGHTS.** Continued debate on S. J. Res. 61, proposing a constitutional amendment to provide for equal rights for men and women (pp. 9423-7, 9432-65).
- SUGAR; RUBBER.** The Finance Committee reported without amendment S. J. Res. 166, to permit alcohol plants to produce sugars and sirups until Dec. 31, 1947, and prohibit disposition of certain alcohol and rubber plants until establishment of a permanent rubber policy (S. Rept. 1740)(p. 9416).
- BUILDINGS AND GROUNDS.** The Public Buildings and Grounds Committee reported with amendments S. 2412, to provide for site acquisition and design of Federal buildings, etc. (S. Rept. 1737)(p. 9415).
- FORESTRY.** The Public Lands and Surveys Committee reported without amendment H.R. 7004, to revise the boundaries of Wind Cave National Park, S. Dak., which involves exchange of land in the Harney National Forest (S. Rept. 1739)(p. 9416).
The Agriculture and Forestry Committee reported without amendment H. R.

6298, to authorize exchange of mineral rights reserved on the Vesuvius watershed in the Little Scioto and Symmes Creek Purchase Units, Ohio, and owned by the Mineral Products Co. and others, for surface rights of equal value owned by the U. S. in other lands that do not drain into Vesuvius Lake (S.Rept.1735)(p.9415).

7. WILDLIFE CONSERVATION. The Agriculture and Forestry Committee reported without amendment H. R. 4362, to abolish the Parker River Wildlife Refuge, Mass. (S. Rept. 1734)(p. 9415).

3. SURPLUS PROPERTY. Received a petition from the Pa. Assn. of Boroughs favoring H. R. 6680, to provide for payments in lieu of taxes on certain surplus property (p. 9415).

9. REPORTS. Received the RFC and OPA reports for the period ended Mar. 31, 1946 (p. 9415).

10. FLOOD CONTROL

HOUSE

10. SUGAR ACT. Concurred in the Senate amendment to H.R. 6689, to extend the Sugar Act until Dec. 31, 1947 (p. 9517). This bill will now be sent to the President.

11. BUILDINGS AND GROUNDS. The Rules Committee reported a resolution for the consideration of H.R. 6917, to provide for site acquisition and design of Federal buildings and give FWA additional powers in the administration of public buildings (pp. 9515, 9525).

12. FOREIGN SERVICE. The Rules Committee reported a resolution for the consideration of H.R. 6967, the proposed Foreign Service Act of 1946 (pp. 9515, 9525).

13. RESEARCH; ATOMIC ENERGY. Continued debate on S. 1717, the atomic-energy bill (pp. 9471-514).

14. FARM MACHINERY. Rep. Hoeven, Iowa, criticized "the Administration's funbling and fiddling" in the farm machinery shortage, criticized the export of farm machinery during the present shortage, and urged that farm-machinery repairs be made available before the planting season next year (pp. 9522-4).

15. PERSONNEL. Rep. Mundt, S.Dak., recommended that funds be made available to the Civil Service Commission for "investigating 'before appointment' the suitability and loyalty of people seeking Government employment" (pp. 9518-22).

16. REPORTS. Received the 17th report of the OPA, for the period ended Mar. 31, 1946 (H.Doc. 711), and the RFC report from the date of its organization, Feb. 2, 1932, to Mar. 31, 1946 (p. 9525).

17. DAIRY INDUSTRY. Rep. Johnson, Ill., stated that butter is selling at prices comparable to the old ceilings plus the subsidy (p. 9470).

18. SOCIAL SECURITY. Rep. Gore, Tenn., claimed that H.R. 7037, to amend the Social Security Act, increases the inequity of existing disbursement of Federal social-security funds (pp. 9515-6).

19. SURPLUS PROPERTY. Rep. Bradley, Mich., said that he was surprised learn that the Accounting Act does not provide for the Comptroller General to check on the disposition of property acquired by Government departments and agencies and urged that Congress correct the situation (p. 9517).

it quite erroneous. Because of that speculation, I think it is incumbent upon me to make this short statement. I participated at great length and at a great expenditure of energy and time in assisting in the preparation of the committee report. There are many things included in the report with which I agree. Many statements in the report resulted from the efforts I made to have them incorporated in the report. But the report as a whole I find myself unable to completely agree with. If you will observe, when the report is finally released, I have filed a very extensive statement of additional views and in affixing my signature to the report I did so with reservations as expressed in those additional views. I trust the Members of Congress will take the time to read them.

The SPEAKER. The time of the gentleman from Wisconsin has expired.

EXTENSION OF REMARKS

Mr. REED of New York asked and was given permission to extend his remarks in the Appendix of the RECORD and to include an editorial.

Mr. JOHNSON of California asked and was given permission to revise and extend the remarks he expects to make in the Committee of the Whole on the atomic-energy control bill and include certain portions of testimony taken in the hearings before the Committee on Military Affairs.

Mr. JACKSON asked and was given permission to extend his remarks in the Appendix of the RECORD and to include therein two press releases.

CALL OF THE HOUSE

Mr. SHORT. Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER. Evidently a quorum is not present.

Mr. McCORMACK. Mr. Speaker, I move a call of the House.

A call of the House was ordered.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 226]

Adams	Elston	Ludlow
Allen, La.	Engel, Mich.	McDonough
Anderson, Calif.	Flannagan	McGehee
Andrews, N. Y.	Fuller	McGlinchey
Baldwin, Md.	Gardner	McGregor
Bates, Ky.	Geelan	McMillan, S. C.
Beckworth	Gibson	Mahon
Bell	Gillespie	Mankin
Bland	Gillie	Mansfield,
Bloom	Gossett	Mont.
Boren	Granger	Mansfield, Tex.
Boykin	Grant, Ala.	Mason
Bunker	Gregory	Miller, Calif.
Camp	Gross	Monroney
Cannon, Fla.	Hancock	Morrison
Cannon, Mo.	Harless, Ariz.	Neely
Clevenger	Harris	Norton
Clippinger	Hart	Patrick
Cochran	Hébert	Peterson, Ga.
Coffee	Hendricks	Powell
Colmer	Hollfield	Price, Fla.
Cooper	Holmes, Wash.	Priest
Courtney	Hook	Reece, Tenn.
Cox	Izac	Reed, Ill.
Cravens	Johnson, Okla.	Rivers
Crawford	Johnson, Tex.	Robinson, Utah
Curley	Kee	Roe, N. Y.
Daughton, Va.	Kerr	Rogers, N. Y.
Davis	Kilday	Rooney
Dawson	Kirwan	Russell
De Lacy	LaFollette	Sheridan
Domengeaux	Larcade	Slaughter
Douglas, Calif.	Lea	Sparkman
Earthman	Lemke	Starkey

Stewart
Sumner, Ill.
Talbot
Tarver
Tolan
Torrens

Vinson
Wadsworth
Weaver
Welch
West
Wickersham

Wolcott
Wolfenden, Pa.
Wood
Worley
Zimmerman

The SPEAKER. On this roll call 309 Members have answered to their names, a quorum.

By unanimous consent, further proceedings, under the call, were dispensed with.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. MAY. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill (S. 1717) for the development and control of atomic energy.

The motion was agreed to.

Accordingly the House resolved itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill S. 1717, with Mr. JOHN J. DELANEY in the chair.

The Clerk read the title of the bill.

The CHAIRMAN. When the Committee rose yesterday the gentleman from Kentucky [Mr. MAY] had 55 minutes remaining, and the gentleman from Missouri [Mr. SHORT] had 36 minutes remaining.

Mr. MAY. Mr. Chairman, I yield 15 minutes to the gentleman from Texas [Mr. THOMASON].

Mr. THOMASON. Mr. Chairman, I cannot recall any bill since I have been here that has had so many red herrings drawn across its trail as the bill now under consideration. There have also been quite a number of alibis and unjust and unfair statements about the legislation. I can appreciate that there is a plan to kill the bill or amend it to death. For that reason, I invite careful reading and study of the bill before you reach any final conclusion. I am for the McMahon bill as it came from the Senate. I have the same interest in national welfare and security that you have. We are confronted with an unusual situation in that we are dealing with an unusual weapon. If I may read just one or two sentences from the declaration of the policy that is announced in the first section of the bill, it will convey my ideas about the matter far better than I can express them. I quote from that declaration:

The significance of the atomic bomb for military purposes is evident. The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved. Therefore, any legislation will necessarily be subject to revision from time to time. It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life. Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. No; I do not yield now. I will yield later.

I would just like to express the hope that there is something to this great discovery known as atomic energy and the atomic bomb besides putting it to military use to destroy the peoples of the world.

This Government spent \$2,000,000,000 and employed 130,000 people to develop this bomb. It was said yesterday by a great many Members who spoke, "You cannot stop scientific research, you cannot stop scientific development any more than you can stop the normal mental processes of the human mind." Every nation in the world will, sooner or later, have the secrets of atomic energy. Other nations are working on it, and we just beat them to it. I have an idea that away back many years ago there were some people who did not know what was going to happen to electricity, or to gunpowder, or, in more recent times, to radar. But, now that our scientists have developed this terrible weapon and now that the recent war is over, we are trying to work out some plan by which we will not have another war such as this last one, which would be even worse than all prior wars. I repeat, I hope and trust we can work out some plan by which atomic energy can be put to useful peaceful purposes and the atomic bomb, as an instrument of war, be outlawed.

I have not manifested as much concern about the military as many who have talked loudest about it. I yield to no man in this House in my loyalty to the armed forces of the country, and I think the record will prove it. I want an Army, Navy, and Air Corps second to none. During the consideration of legislation which was before us recently, especially the extension of Selective Service and other pieces of legislation of somewhat like nature, we heard a lot about the brass hats and the caste system and all that sort of thing. I defended the Army but those who talk loudest today spoke contemptuously of them then. It is true, the armed forces have this secret at the present time. The real bone of contention, and I think the only one of any very great importance—at least that is the most controversial—is what part the military will have in this Commission. For that reason I again invite a careful reading of the bill, especially subsection (c) of section 2, which appears on page 7 of the bill.

To recount a little history, you will perhaps remember the House Military Affairs Committee had extended hearings on the so-called May-Johnson bill, which was reported by the committee and then came to the Rules Committee and the Rules Committee did not report it and it never reached the House. When a bill of like nature reached the Senate, there was one group that wanted the May-Johnson bill. There was another group that did not want any of the military represented on the Commission.

Now, you have heard a lot of talk about all the Communists being for the Senate bill. I do not know anything about them,

so I cannot speak for them, but there were a lot of people who are not Communists who were for this bill as it passed the Senate. The man responsible for the military liaison amendment was none other than the distinguished Senator from Michigan, Hon. ARTHUR VANDENBERG.

The Vandenberg amendment contains these words:

There shall be a military liaison committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine.

The Army and Navy can send to the Commission just as many of its representatives as they want, and also name the persons who shall constitute that committee; and, more than that, they do not say that the committee may advise with them, but that the Commission shall advise and consult with the committee on all atomic energy matters which the committee deems to relate to military applications, including the development, manufacture, use and storage of bombs, the allocation of fissionable material for military research, and the control of information relating to manufacture or utilization of atomic bombs.

The amendment further provides as follows:

The Commission shall keep the committee—

Meaning the military committee, the official representatives, if you please, of the War and Navy Departments, they—shall keep the committee fully informed of all such matters before it, and the committee shall keep the Commission duly informed of all atomic energy activities in the War and Navy Departments. The committee shall have authority—

Listen to this—this is the military and naval committee sitting around with the civilian Commission—

The committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the committee—

Meaning the representatives of the Army and the Navy appointed by the Secretary of War and the Secretary of the Navy—

at any time conclude that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the Departments of War or Navy, derived from the Constitution, laws, and treaties, the committee may refer such action, proposed action or failure to act to the Secretaries of War and Navy.

And listen to this:

If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

I would like for someone to tell me what is wrong about that. Here we are a civilian Government; we are not a military Government and never will be, I hope. If we were I assume you would put some distinguished general in as Secretary of War and you would take some great admiral and make him Secretary of the Navy and just let us have a military Government while we are at it. This Government was not founded un-

der any such theory, it was not founded upon any such policy; it was never intended and it never has been the case that the Army and Navy constitute the policy makers of this Government, and they must not be. They are the servants and agents of our civilian Government. I do not therefore understand how some of those who have spoken about the Communists and these other red herrings they have dragged across the trail, can believe as they do with the amendment proposed by Senator VANDENBERG and unanimously adopted by the members of the special committee whose names I called the other day, but for the purpose of emphasis and also for the record I venture to put them in again: McMAHON of Connecticut, GEORGE of Georgia, BYRD of Virginia, TYDINGS of Maryland, CONNALLY of Texas, AUSTIN of Vermont, MILLIKIN of Colorado, HICKENLOOPER of Iowa, and Admiral HART, now Senator from the great State of Connecticut. And yet here was Senator VANDENBERG, great man that he is, Senator CONNALLY, great man that I think he is, chairman of the Foreign Affairs Committee, joining in conference after conference with our distinguished Secretary of State, in recommending this very type of legislation. There was Senator CONNALLY, chairman of the Foreign Affairs Committee, there was Senator VANDENBERG, there was Admiral HART, who had distinguished himself as an admiral of the Navy for many years before he went to the United States Senate; there was one of the greatest Americans I know who has recently gone to the United Nations, Senator AUSTIN. Every one of them joined in the passage of the McMahon bill as it came to us.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman.

Mr. THOMAS of New Jersey. Is the gentleman advocating that only the Senate should have any voice in this matter?

Mr. THOMASON. When that type of men, after 5 months of hearings and consideration, unanimously agree I would say that it is not controlling but persuasive. The four large volumes of hearings that were printed were made available to the gentleman from New Jersey and every member of the committee. During those hearings they had great scientists, many high-ranking Army and Navy officers, they had outstanding businessmen of the country, including Barney Baruch, before the committee. The special committee agreed unanimously. Not only that but when the bill got to the floor of the Senate, after the Vandenberg amendment was adopted, the bill not only had the unanimous support of the special committee with those men on it whom I have mentioned, but it received the unanimous support of the Senate of the United States itself. I do not think that is necessarily conclusive, but it has great weight with me.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from California.

Mr. JOHNSON of California. Is it not a fact that our committee read this bill word for word day in and day out, and

the majority came to virtually the same conclusion?

Mr. THOMASON. Absolutely. That is not all. Secretary Patterson came before our committee, likewise the Under Secretary of the Navy, and said that, speaking for themselves and for General Eisenhower, they heartily approved the McMahon bill. They do not want control of atomic energy. If they are satisfied from a military standpoint, and they are the ones charged with the defense of our country, why should not we be satisfied?

The CHAIRMAN. The time of the gentleman from Texas has expired.

Mr. MAY. Mr. Chairman, I yield the gentleman two additional minutes.

Mr. THOMASON. Mr. Chairman, there are a lot of people for this bill. They are not all crackpots, either. Not only that, but you cannot draw a red herring across this trail by getting up and asking "Will the gentleman yield?" and then asking "Is it not a fact that Lilienthal is going to be a member of this Commission?" Well, I am sure there have been no commitments as yet. I do not know anything about Lilienthal except he has made a success of the greatest enterprise of its kind in the world. Another red herring question was "Will Elmer Davis be director of publicity?" I cannot answer, but I regard him a great American.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Kentucky.

Mr. MAY. Does the gentleman admit that there appeared before the House Committee on Military Affairs and supported strongly the May-Johnson bill and said it was essential at that time such men as Vannevar Bush, Secretary Patterson, and others?

Mr. THOMASON. Perhaps so. John R. Oppenheimer, Dr. Compton, of Massachusetts Institute of Technology, and all the other great scientists are for this bill.

Some speaker quoted George Washington. We are living, Mr. Chairman, not in 1776; we are living in 1946. We are confronted with a new situation, and we must meet it from the practical standpoint.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from California.

Mr. VOORHIS of California. In reference to the Vandenberg amendment, I want to emphasize the fact it is the Military Committee that decides on all matters which the commission must report on. The commission does not decide that.

Mr. THOMASON. The Secretary of War and the Secretary of the Navy are not trying to form the policies of this country. They do not want that job.

Mr. HALE. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Maine.

Mr. HALE. Under the Senate bill, is there any reason why the Secretary of the Navy and the Secretary of War should not sit on the commission?

Mr. THOMASON. No; I know of no reason that they cannot sit on there. They do not want to sit on there. Does the gentleman mean could they sit themselves?

Mr. HALE. Yes.

Mr. THOMASON. Why, the Secretary of War and the Secretary of the Navy, both of whom are civilians, can appear there themselves if they want to.

Mr. Chairman, I ask the Members to read this bill carefully. It is a good bill, and the exigencies of the times demand that something be done.

The CHAIRMAN. The time of the gentleman from Texas has again expired.

Mr. SHORT. Mr. Chairman, I yield 5 minutes to the gentleman from Massachusetts [Mr. CLASON].

(Mr. CLASON asked and was given permission to revise and extend his remarks.)

Mr. CLASON. Mr. Chairman, it is my opinion that action by the Congress on a law to cover our Government's activities in research and development of atomic energy is overdue.

The special committee who recommended and who aided in the draft of the May-Johnson bill are listed on page 17:

Secretary Stimson, chairman; James F. Byrnes, then a private citizen; Will Clayton, Assistant Secretary of State; Ralph Bard, Under Secretary of Navy; George Harrison, Special Assistant to Secretary of War; Dr. Vannevar Bush, Chairman of the Office of Scientific Research and Development; Dr. Karl Compton, president, Massachusetts Institute of Technology; Dr. James Conant, president, Harvard University.

Therefore, the May-Johnson bill was brought out on the recommendation of a group of very well known and, I think, highly respected American civilians. Hearings were held at length last October before the House Committee on Military Affairs, and I am sure that our committee has done everything possible to secure action on this type of legislation.

The bill went to the Senate. The Senators created the special committee headed by Senator McMAHON, and as a result we have this bill which is before us here today.

This bill, like the May-Johnson bill, provides for civilian control over the research and development of atomic energy by the United States Government. I do not think that either bill can properly be convicted of giving the military too much control, and I do not think that either the Army or the Navy wish it. I favor civilian control.

However, I do wish to call attention to the testimony of Mr. Kenney, Assistant Secretary of the Navy, who tells us in very interesting words on page 48 that the position of the Navy in connection with this bill is unique:

The Navy is the greatest user of power and the largest power engineering organization in the world, which gives it an interest in the development and application of atomic energy for power uses. In addition, the fact that ships must carry their fuel makes it probable that the first general use of atomic power will be at sea rather than ashore.

Mr. Kenney says that he is disturbed over this bill in several of its provisions,

and one of them is in regard to whether or not the Army and the Navy are going to be allowed to carry on their present research and development work without interference from this Commission. They are told by the report of the Senate committee that they will be allowed to do so. However, Mr. Kenney points out that this is only by a matter of interpretation of the words in this bill. On page 58 he indicates, as I see it, the reasons why this bill should be changed and amended, and therefore in order to make certain that an interpretation is not going to determine the future work of our Army and Navy, I intend to offer an amendment to the bill on page 11, at the end of line 2, to permit the armed services to carry on their independent military research—under the provisions of this bill, to be sure—but without any interference with what they are now doing.

Already this Congress has appropriated over \$375,000,000 for the continuation of atomic-energy research and development by the War Department for the next fiscal year. About \$200,000,000 is in connection with contracts already let; \$175,000,000 is for contracts to be let for additional work to be done. These sums are in addition to what this Commission, if it is appointed, will ask for its work. This is big business involving over \$1,000,000,000 worth of plant and equipment. I feel that we must give the Army and the Navy the protection which they seek, and at the same time give to this Commission the money they need to develop atomic research for the propulsion of merchant ships, for the development of power plants for municipalities, for light, heat, power, medicine, and other purposes.

I believe that in giving this full control to civilians we ought to take care of other issues. I believe that any five civilians of sufficient ability to belong on this Commission will be fair to civilians, to the Army, and to the Navy. If this bill proves to have faults we can amend it. In the meantime the Government will have established an organization which will be forging forward for the benefit of our American people, and, I hope, for all mankind.

[Mr. BIEMILLER addressed the Committee. His remarks will appear hereafter in the Appendix.]

Mr. SHORT. Mr. Chairman, I yield 10 minutes to the gentleman from California [Mr. HINSHAW].

Mr. HINSHAW. Mr. Chairman, I have listened with interest to the gentleman from Texas [Mr. THOMASON] and the gentleman from Wisconsin [Mr. BIEMILLER] and others who have discussed the question of whether or not military men should be on this Atomic Energy Commission. I want to say to you here and now that considering the context of the bill any such discussion is poppycock. It is not relatively important in comparison with what this bill does.

If you will give careful attention to the bill you will find that, generally speaking, it divides itself naturally into two parts. The first part is that part of the bill or those parts of the bill grouped together which, in total, completely vest all rights, titles, and interests, not only of every person in the United States, but

of every agency of the Government of the United States, in any property or any rights in production facilities or any raw materials and any patent rights and even any ideas, in the Commission as the sole and exclusive owner.

The second part of the bill which is of even more vital importance is section 8. I desire to call your attention to section 8 and hope you will turn to it and read it while I read it aloud.

It is entitled "International Arrangements."

SEC. 8. (a) Definition: As used in this act, the term "international arrangement" shall mean any treaty approved by the Senate or international agreement—

The committee proposes to here insert the word "hereafter", so the section will read:

hereafter approved by the Congress, during the time such treaty or agreement is in full force and effect.

(b) Effect of international arrangements: Any provision of this act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this act shall be deemed to be of no further force or effect.

Then subsection (c), Policies Contained in International Arrangements:

In the performance of its functions under this act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

Now, my colleagues, the first group of provisions in this bill to which I have referred, as I said before, vests in the Commission all rights, titles, and interests, in everything having to do with atomic energy, certainly in the United States. Then it provides that when an "international arrangement" is agreed to the Commission shall give maximum effect—note carefully the words "give maximum effect"—to the policies contained in the arrangement, and that any provision of this act or any act of the Commission to the extent that it conflicts with the provisions of the international arrangements are thereafter null and void and of no further force or effect. Note that provision carefully. That is really important.

Then turn to the so-called Lilienthal report, being A Report on the International Control of Atomic Energy, made by a board of consultants of which David E. Lilienthal was chairman. In chapter 1 of section 3 on page 35 of the report, it says:

All the actual mining operations for uranium and thorium would be conducted by the Authority. It would own and operate the refineries—

Now they are speaking of an international authority here, not this American Commission we are establishing by S. 1717. I read further:

It would own and operate the refineries for the reduction of the ores to the metal. It would own the stock piles of those materials and it would sell the byproducts, such as vanadium and radium and so forth.

That says very plainly that an international authority will conduct mining operations in the United States, and own and operate the refineries in the United States, and own the stock piles of material in the United States and sell the byproducts. It implies also, of course,

that the international authority would necessarily also own and operate, produce and sell those things in every other country. That means a broad abandonment of sovereignty on our part and on the part of other nations. The report advises us very plainly that in the dawning atomic age such abandonment of sovereignty is necessary to the peace of the world and the safety and happiness of its citizens.

Then, under plant, it says practically the same thing as it does for mining.

It says:

The second and major function of the international authority would be the construction and operation of useful types of atomic reactors and separation plants. This means that operations like those at Hanford and Oak Ridge and their extensions and improvements would be owned and conducted by the authority—

Meaning the international authority. In other words, this bill provides first that the Congress vest full authority in the Commission to take over, in absolute ownership, everything connected with atomic energy in the United States, including ideas; and then directs that when this proposed international arrangement is made, all of this property acquired by the American Commission shall be turned over to an international authority. Now, that is the kernel of this very hard nut. That is the thing which we must decide. All the rest of these issues are minor. They are relatively unimportant and we should not spend much time in discussing them. This is the question we must consider and consider carefully. Are we willing in the first place to vest all right, title, and interest in everything connected with atomic energy, including the bombs already manufactured, in a commission, and then give the Commission authority and even direct it to turn all this over to an international authority?

Mr. GRAHAM. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield.

Mr. GRAHAM. And if an international arrangement is incorporated and one of the high contracting parties vetoed that, it is of no effect, and null and void.

Mr. HINSHAW. I thank the gentleman. I was coming to that. It seems to me, in view of the very unsettled condition in the United Nations Organization Atomic Subcommittee, and the very difficult situation that has been brought about through lack of unanimous agreement in that committee, that this Congress and this House at this point would do very well to hold this legislation for a little while, begging the pardon of the chairman of the committee. I know he has been diligent in bringing this matter to the floor. But it seems to me that in view of the seriousness of the present situation and the flux that everything seems to be in, in the United Nations Organization, it would be very well if we withheld action on this matter for a little while. I may be entirely in favor of the provisions of this bill, even including the patent sections set up in the bill, and I have no argument on the question of who should be on the Commission. I think that is a small matter. It does not

matter greatly whether it is military men or nonmilitary men. I am perfectly willing that it should be nonmilitary men.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield.

Mr. MAY. Does the gentleman have any views with respect to a possible difference in cost that would be incurred by a separate outside Commission as provided in the bill, and that which is now being carried on by the Army at Oak Ridge?

Mr. HINSHAW. I have no ideas on that, but perhaps the gentleman's committee has taken some testimony on that subject. I do not find any in the hearings. As a matter of fact, this little volume of hearings deserve to be about 3 inches thick instead of three-eighths of an inch, and to contain the complete views of everybody in the United States concerned in this vital subject, because in the very preamble of S. 1717 it sets out that this bill is liable to change the entire way of life not only of the people of the United States but of the people of the world. Therefore, it deserves long, careful, and well-published hearings. I do not find much in the hearings except glittering generalities. I understand that the committee sat in hearings only 3 days.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield.

Mr. DONDERO. The gentleman does not anticipate that Russia would veto the turning over of this \$2,000,000,000 worth of improvements that the United States has invested in this matter?

Mr. HINSHAW. If you would like to refer to it as such, this bill is one of the greatest acts of appeasement to Russia that has ever been performed by the United States, and that includes all the lend-lease sent to them. I may be in favor of this kind of appeasement. I do not yet know. The scientists all point out that you cannot keep scientific information to yourself; that the basic information that led to the development of the atomic bomb did not come from the United States, but came from various foreign sources. Those foreign sources have that information, because they brought it to us. We did not give it to them. The only knowledge we have that they do not have is some of the techniques in connection with the actual manufacture of this bomb and the release of explosive atomic energy; and it is not a question of basic facts at all.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield.

Mr. VOORHIS of California. I think the gentleman's analysis of the bill is very helpful. Would not the gentleman agree with me, however, that we are faced with the general risk of the unilateral development of atomic weapons by many nations on the one hand or the alternative of finding some international agreement whereby that can be prevented on the other?

The CHAIRMAN. The time of the gentleman from California has expired.

Mr. MAY. Mr. Chairman, I yield the gentleman one additional minute.

Mr. HINSHAW. We may be running that risk; I do not know; but I do know that they are likewise in the position of seeing us here with this plant established and with this atomic energy know-how. That risk of unilateral development is not an immediate risk because the report states that at even if we did nothing further about this bill no other nation would be able to develop anything with which to actively threaten us within about 5 years.

Mr. VOORHIS of California. I think that is true.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield.

Mrs. LUCE. Is it the gentleman's thought that if such a world authority to control atomic energy were formed that we would have to give them not only our so-called secrets but land, facilities, and raw materials?

Mr. HINSHAW. Indeed we might; this bill provides for it; and then the international authority would own all of the plants in the United States they required for their purposes and we would be required to turn everything over to them. We would be then harboring an extraterritorial authority within the United States.

Mr. Chairman, under authority granted to extend my remarks I include the following:

Mr. Chairman, I have given as careful study to the bill S. 1717 which is an act for the development and control of atomic energy, as has been possible in the limited time available to me from my other duties. I have listened attentively to the debates, read several reports, and have received a number of letters from qualified persons on this subject. It seems to me that most of those who have engaged in this debate thus far, have missed the point of this bill. I believe that in order to understand this bill, one must first read the "Report on the International Control of Atomic Energy," prepared for the Secretary of State's Committee on Atomic Energy by the board of consultants, of which Mr. David E. Lilienthal is chairman. Section III of that report contains the summary of their proposed plan. I desire to quote from that summary as follows:

The proposal contemplates an international agency conducting all intrinsically dangerous operations in the nuclear field with individual nations and their citizens free to conduct, under license and minimum of inspection, all nondangerous, or safe, operations.

The international agency might take any one of several forms, such as a UNO commission, or an international corporation or authority. We shall refer to it as Atomic Development Authority. It must have authority to own and lease property, and to carry on mining, manufacturing, research, licensing, inspecting, selling, or any other necessary operations.

Further in this summary, it states:

The proposal contemplates an international agency with exclusive jurisdiction to conduct all intrinsically dangerous operations in the field. This means all activities relating to raw materials, the construction and operation of production plants, and the conduct of research in explosives.

In chapter I of section III, it states:

The first purpose of the agency will be to bring under its complete control world supplies of uranium and thorium.

All the actual mining operations for uranium and thorium would be conducted by the Authority. It would own and operate the refineries for the reduction of the ores to the metal or salt.

Then, further quoting from chapter I, section III:

The second major function of the Authority would be the construction and operation of useful types of atomic reactors and separation plants. This means that operations, like those at Hanford and Oak Ridge and their extensions and improvements would be owned and conducted by the Authority.

Under the subject of licensing activities, the report states:—

The uranium and thorium which the Authority mines, and fissionable materials which it produces will remain the property of the Authority.

The entire statement should be read to be appreciated.

Now, to return to the bill S. 1717 which is before us for consideration. A most casual reading of this bill will indicate quite clearly that its purpose is to key the entire atomic energy program of the United States into the program proposed for the so-called International Atomic Development Authority.

Section 4 (b) contains the prohibition that it shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

Then section 4 (c) provides that the Commission shall be the exclusive owner of all facilities for the production of fissionable material other than certain designated facilities useful in research, and other facilities which have a low potential production rate.

Then section 5, vests all right, title and interest within or under the jurisdiction of the United States in or to any fissionable material, now or hereafter produced. Section 5 then proceeds to prohibit the export or import into the United States of any fissionable material, and to prohibit any person to engage either directly or indirectly in the production of any fissionable material outside the United States. It furthermore authorizes the Commission and directs it to purchase, take, require, condemn, or otherwise acquire, supplies of source materials, or any interest in real property containing deposits of source materials. In fact, the entire bill, in its various applications, gives the Commission greater authority than has been given to any other agency of the Government at any time in history—and that includes in my humble opinion, any powers that may have been given to the President, and to the War and Navy Departments in the conduct of a war.

Section 9 of the bill even goes so far as to order the President to direct the transfer to the Commission of all interests owned by the United States or any governmental agency, not only all fissionable material, but all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable

material or atomic energy; all processes and technical information of any kind, and the source thereof—including data, drawings, specifications, patents, patent applications, and other sources—relating to the processing, production, or utilization of fissionable material or atomic energy; and all contracts, agreements, leases, patents, applications for patents, inventions, and discoveries—whether patented or unpatented—and other rights of any kind concerning any such items, including the transfer of the Manhattan Engineer District to the Commission. And of course, the act turns over to the Commission irrevocably, any and every patent relating to atomic energy, and even requires that any person who has made or hereafter makes any invention or discovery along these lines, to report within 60 days to the Commission giving a complete description thereof.

Now, permit me to quote to you the exact wording of the bill and its definition of the term "person," subsection c, beginning at page 50:

The term "person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States, or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent, or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions.

Please note carefully this definition of the word "person" because for the first time to my knowledge a congressional act includes in the term "person" the United States, or any agency thereof, any government other than the United States, or any political subdivision of any such government, while at the same time this definition of the term "person" excludes the Commission or officers or employees of the Commission in the exercise of duly authorized functions. In other words, Mr. Chairman, this bill completely divests from every person, including the United States or any agency thereof, and any government other than the United States, or any political subdivision, of all their right, title, and interest in and to all property, patents, and even ideas that may have anything to do with source material, and the production of fissionable material, the material itself, and every other activity connected with atomic energy, and invests all such right, title, and interest in the Commission. In the words of the act itself it provides "that the Commission shall be the exclusive owner of all facilities."

Now for the purposes of this discussion, let us consider that the Commission has proceeded to acquire all of these rights, titles, and interests to everything in the United States that has to do even remotely with atomic energy and then let us turn to section 8, which is captioned "International arrangements." I desire to quote section 8 in full again, as follows:

As used in this act, the term "international arrangement" shall mean any treaty approved by the Senate or international agreement hereafter approved by

the Congress, during the time such treaty or agreement is in full force and effect.

(b) Effect of international arrangements: Any provision of this act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this act shall be deemed to be of no further force or effect.

(c) Policies contained in international arrangements: In the performance of its functions under this act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

Section 8 is indeed the key to the entire bill. That is the section which makes it mandatory upon the Commission in the performance of its functions under the act, to give "maximum effect to the policies contained in any such international arrangement."

Please note further, and under the assumption that all of this property, including production facilities, patents, and so forth, having already been acquired by the Commission, and title to which has been irrevocably vested in the Commission, that under subsection (b) of section 8, any provision of this act which we are here considering as S. 1717, or any action of the Commission to the extent that it conflicts with the provision of any international arrangement made after the date of enactment of this act, shall be deemed to be of no further force or effect.

In other words, Mr. Chairman, this bill carries out absolutely the intent of the report on the International Control of Atomic Energy prepared by the Lilienthal committee for the Secretary of State, from which I have already quoted, and which provides that the International Atomic Development Authority must "own and lease property, carry on mining, manufacturing, research, licensing, inspecting, selling, or any other necessary operations," and the bill provides quite definitely that when any such international authority is agreed to by the Congress of the United States that it shall be mandatory for the Commission to turn over to the International Authority all such property and rights as have been acquired by the Commission, and in turn provides for the repeal of any provision of this act to the extent that it conflicts with the provision of any such international arrangement.

That, Mr. Chairman, is the essence of S. 1717 as I read the bill.

Perhaps the provisions of S. 1717 are the same provisions that this Congress, or two-thirds of the Senate, as the case may be, will approve in years to come. Perhaps it is the only answer to the new era which is so terrible to contemplate—the atomic age. I am sure that I am not wise enough to know. The entire subject is awful to contemplate. I wish that this bill were not before us just now. I wish that every Member of the House could have time to consider further, to study, and indeed to pray over this subject. Indeed, I am sure that even the great Committee on Military Affairs, which presents this bill, does not fully understand its implications. The members of that committee admit that fact freely.

The CHAIRMAN. The time of the gentleman from California has expired.

(Mr. HINSHAW asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I yield 5 minutes to the gentleman from North Carolina [Mr. BARDEN].

(Mr. BARDEN asked and was given permission to revise and extend his remarks.)

Mr. BARDEN. Mr. Chairman, I spent a great deal of time on the floor yesterday listening to the debate on this bill. I have been interested this morning listening to the debate and to the statement of my distinguished friend from Texas. I have great confidence and respect not only for him but for his opinions. I listened to the gentleman from Wisconsin [Mr. BIEMILLER].

I find myself in somewhat the same position I am quite sure about 90 percent of the Membership finds themselves in, and that is a state of general confusion over this bill. We have here in this bill 53 pages dealing with something that it took years and \$2,000,000,000 to find, and yet we speak of it as secret, and so far as knowing anything about it is concerned, to this House it is in reality a secret.

I realize the gentleman from Texas has spent more time on the Military Affairs Committee than I have and probably while "the eagle are flitting around sparrows should seek cover," but this is one sparrow that is beginning to have the feeling that things are closing in on him. I do not know a man in the world today who has brains enough or vision enough to predict what will happen with even a fair degree of certainty within the next 60 days, and here we are about to allcate unto ourselves enough synthetic wisdom to make ourselves believe that we can plan for 5 or 6 years for the most deadly, the most dangerous, and the most potent weapon of destruction this world has ever seen. Someone referred to it yesterday as a case where the scientists have snatched something from the control of God. It is not out of His control, neither are we. I think He, by releasing it, expects all of us to proceed cautiously and wisely.

I have not heard anyone express an opinion on the floor of this House contrary to the point of view that 6 months' study and wait to see just what turn world conditions may take will do no harm. We are at war. The peace is not yet signed. It is true we have allies, but we have some allies that are even now throwing our officers in concentration camps—not a very friendly act regardless of how we may theorize upon the subject.

Mr. Chairman, I approach this matter with very little question in my mind about voting for the bill. In fact, from what I had heard of it I was almost sure I would vote for it. I listened to the statement of the Chairman of this Committee, who made a very clear and concise presentation. He gave to the House the full benefit of the information he had, but after listening to the debate I have anything but a sense of security, a sense of certainty about what I am about

to do or what the results might be if I did vote for it.

Mr. Chairman, this matter should go back to this very able and fine committee for a thorough, definite, and detailed study.

The CHAIRMAN. The time of the gentleman from North Carolina has expired.

Mr. MAY. Mr. Chairman, I yield the gentleman two additional minutes.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. BARDEN. I yield to the gentleman from Connecticut.

Mrs. LUCE. Apart from the gentleman's natural conclusion, which we all share about the future of nuclear energy or the principles of nuclear fission, does the gentleman have any clear idea about the character of this legislation, as to what type of legislation he believes it should be as a legislator?

Mr. BARDEN. The gentlewoman only adds to my confusion.

Mrs. LUCE. I am so sorry. May I ask a direct question. Does the gentleman think, for example, that this bill, as stated in the preamble, will do anything to increase our standard of living or to encourage the free enterprise system in America?

Mr. BARDEN. My good lady, if you would strike out the words "atomic energy," not use the word "atomic" in the preamble, Hirohito or Tojo would have subscribed to the preamble and inserted the words "military organization." They would have posed and presented to their people that that was the salvation of their country. I cannot give much consideration to the preamble. We pass laws here and only God and the administrators know what is going to happen to either us or to the laws when they get downtown.

Mr. Chairman, this thing was developed as a military weapon, as a weapon of defense; it has been handled by the War Department up to this point. If they do not have the power, the authority and the funds to continue research and development until the peace is signed, then they should be given that power and we should let them alone. I have never been more confirmed in an opinion in my life. We have a provision in here that if somebody turns it over to another country we are going to fine them \$20,000, and the gentleman from Wisconsin [Mr. BIEMILLER] says "pass it." I say define treason so as to include the betrayal of this Nation by giving the atomic bomb secret to a foreign nation and if any person or group of persons violate this provision line them up on the wall, and give them the bullet treatment.

I say let this bomb, and all information pertaining to its manufacture as well as the manufacture of it remain where it is at least until the peace treaties are signed. I say put the peace treaties first, and after they are signed we will have plenty of time to take it from the War Department and set up commissions and so forth. There is no need to rush. I hope 6 months from now the international fog will be cleared away and all names will be signed to the peace treaty.

The CHAIRMAN. The time of the gentleman from North Carolina has expired.

Mr. SHORT. Mr. Chairman, I yield 10 minutes to the gentleman from California [Mr. JOHNSON].

Mr. JOHNSON of California. Mr. Chairman, the reason I am for this bill is because of the hearings I attended and the witnesses I listened to. This is a complicated matter; it is a mighty serious matter. Maybe we ought to have some amendments. For instance, I offered an amendment in the Committee to virtually strike out the entire statement of policy, the one referred to by my colleague from Connecticut yesterday. I also intend to offer an amendment with reference to personnel so that the President may be permitted, if he wishes, to make an army or navy man a member of the Commission. I am not for this bill because any particular group or any particular nation is for or against this sort of set-up. As I say, I believe that our very future, our security, in fact, our life as a Nation is dependent upon the way we handle this atomic situation.

Why do I say that? If you will sit down and take a globe and look at the area of the earth from the 30 degree latitude, north, over the entire world, you will be looking at the area in which the great industrial nations of the world are located. You will notice that that area contains all the great military powers. You all know better than I, perhaps, that you can now span that area from any part of it to any other part in a matter of a very few hours. The distance from Chicago, from New York, from Los Angeles or from Detroit to any one of the great capitals of Europe is only a matter of hours, in time.

Just try to contemplate, if you will, what would happen to our country if we got into an atomic war. You know and I know that the next war, if we have one—and I hope and pray we never will have one—is going to be an atomic war. One fleet of airplanes could carry enough bombs to devastate every large industrial city in the United States of America in the matter of a few hours. That is the thing that we have to keep in the background of our thinking when we consider what to do about this matter.

There are some sweeping provisions in the bill, like the matter of patents. We can amend that. Perhaps it is too sweeping that we take in the property that we may use to make atomic material and to make atomic energy from. But do you not see that we have an instrument here that is the most revolutionary of anything of its kind in the whole history of the world? Therefore we have to give a different kind of medicine today than would have been applicable at any other time if we are to even pretend we want to avoid another war.

This is only an interim bill. We are only providing those things and trying to control the development of atomic energy and handle the situation for our own welfare and with no injury to ourselves until we can find some way to outlaw atomic war. I mentioned the other day that an article recently appeared in the Saturday Evening Post, written by some

young, brilliant Army officers of our Army, who had made an over-all study of the atomic problem, and they came to the conclusion, just like I have and I believe many Members of this House have, if they have studied the problem seriously, that there is only one way that we can get security in this atomic age, and that is by agreement with the other powers of the world that we effectively outlaw this bomb.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. JOHNSON of California. I yield to the gentleman from Michigan.

Mr. DONDERO. Does the gentleman think that we will have any better success on this subject than we are having under our United Nations agreement to bring about world peace?

Mr. JOHNSON of California. Frankly, I do not know, but I am hoping desperately that we will.

I want to point out that what Mr. Baruch has proposed does not give away anything. It provides explicitly that we must be assured that the arrangements we make, and whatever we give away, will not interfere with or jeopardize our security. The only way that I can see that we can avoid complete extermination of the human race is to find some way to get along with our neighbors and see that atomic energy is controlled and not used for warlike purposes. It may be a long, rocky, difficult road, but from my consideration of the problem that is the only way that the human race and the American people can be assured of security.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. JOHNSON of California. I yield to the gentleman from California.

Mr. VOORHIS of California. I just want to thank the gentleman for what he said and to say that I agree with him. I agree with him that it may be a long, rocky road, but it is the only way in which the American people themselves can be assured of security, and the Baruch proposal would give them that security, and it seems to me that anything that can be done to advance acceptance of that proposal around the world, so that we can have enforceable assurance that no nation can have or use these weapons, would be worth doing.

Mr. JOHNSON of California. I believe that we can set up an arrangement that will protect us.

Just look at the curious situation we are in. Here we are one of the great Christian nations of the world. Practically every other nation that proposes to use this weapon is a Christian nation. We traveled in Europe last summer. We saw every physical evidence of the development of Christianity, gorgeous temples, beautiful painted glass, wonderful altars. Yet right there where Christianity was born and flowered is where every single war has been generated in the last three or four hundred years. War, we must realize, is merely legalized murder. It is violative of every Christian principle.

We came out of this war as the great colossus, the great military and industrial colossus of the world. I believe we are the one that can furnish the leadership if we have patience and diligence

and the continued effort to bring about leadership that will avoid the atomic war we are all looking at just across the horizon.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. JOHNSON of California. I yield to the gentleman from New Jersey.

Mr. THOMAS of New Jersey. I understand from the gentleman's remarks that the main reason he is in favor of this particular bill is that he is in favor of the Baruch proposal, and that this would dovetail with that.

Mr. JOHNSON of California. I do not know the details of the Baruch proposal other than what I read in the papers, but I believe the Baruch proposal is the way we have to travel if we want peace. You simply cannot get peace by defense, in the atomic age, by merely having more atomic bombs than the other party has. If the atomic war comes, I predict the human race will have to live like a bunch of gophers, under the ground, coming up only to take a look at the sunlight and to get some fresh air, so devastating is this instrument.

Mr. THOMAS of New Jersey. This is what I was leading up to. Suppose Russia does not agree to the Baruch proposal, would the gentleman then be in favor of this kind of legislation?

Mr. JOHNSON of California. No. My whole assumption is that it paves the way for world agreement among the great powers that will avoid this disastrous war that some people are already talking about. There is nothing that is going to strip us of our liberties in this bill. I predict that if atomic energy is controlled, and we do not have a war, what will happen will be this: We will use atomic energy for civilian uses. The Government will relinquish, and I think Congress will make it relinquish, rigid controls of that energy, once we have locked the bomb into the international safe, you might say, and thrown the key away. Then we will relinquish those controls, then we will use this energy for the welfare of mankind. But I tell you frankly that with the situation as it is, in my opinion that is the only approach we can take to it. We must control this and not let this devastating force get into the hands of individuals or small groups. If we do not control this force—this weapon if you please, it may destroy us.

We have heard it repeatedly on this floor that this bill will give away the "secret" of the atomic bomb. There is not one thing in the bill to warrant such a statement or conclusion. The "secret" is one of the most misunderstood things about this whole problem. There really is no secret as to atomic principles. The only secret is the industrial technique of making the bomb. In order to put the Members straight on this problem, I am inserting here, having obtained permission to do so prior to the time we resolved ourselves into the Committee of the Whole House, a statement by General Groves, who had charge of the production of the bombs. This is from the testimony taken before our committee, when we considered the May-Johnson bill:

General GROVES. The big secret was really something that we could not keep quiet, and that was the fact that the thing went off. That told more to the world and to the physicists and the scientists of the world than any other thing that could be told to them. It was something that we did not know until we had spent almost \$2,000,000,000 and had worked about 3 years. We did not know whether it would go off or not, and that is the thing that really told them more than anything else that could be told.

The secrets, as they are loosely termed in the public discussion, are divided properly, I think, into about three classes. One class of these secrets consists of established scientific facts which were not secret at all. They were well known to the best scientists of the world before this work ever started. They had been published. They had been published in odd places, but were easily collectible. Anyone who wanted to could find those secrets. Coupled with those were certain others which had been theories before the explosion confirmed them, and the deductions were what would naturally be made by competent scientists. When we speak of competent scientists in this field we mean scientists that are top-notch, not just first-class men. Those secrets could be deduced by those men knowing that the bomb had actually gone off. The extent of that information which, in fact, was public knowledge to the scientists of the world, is the limit of the Smyth report which you have heard so much about. In other words, nothing in that report discloses any secrets to the world.

The second classification of secrets is the scientific developments which went beyond this, and most of those developments were not basic. They were made up of hundreds and hundreds of problems that had to be solved before this work could be done.

They involved things such as the purification of metals and the purification of other products and the handling of certain products that are not easy to handle safely. They involved all the research work, principally that which was done in many laboratories by thousands of scientists. There are other ways to do this. We hit one way. Probably there are several ways in which you can do those various items, but they require a tremendous amount of work.

This could undoubtedly be achieved by other nations if they spend the money, the labor, and the time and have the scientific organization with which to do it. In time, they can, of course, do it. It is merely a case of relative speed.

Another class of secrets falls in the industrial sphere. This contains many industrial applications which, in the course of time, will be made known in this country.

A man who has worked on this project and who is confronted with a similar problem in industrial life cannot forget the solution that was used on this project, and he is going to use that information no matter how honorable he is, and he cannot be prevented from doing it. It is just like a child who is given an arithmetic problem to solve and knows the answer in advance. He cannot help but take advantage of knowing that answer.

The other class of secret, which is the biggest field, is the ingenuity and the skill of the American worker and the American management, both the top management and the junior management, and that is a secret that I do not think any other nation has, and I do not think anyone is going to have it in a hurry.

The net effect is that we are ahead at the present time. It will take the other countries a number of years to catch up, and opinion as to that number of years will depend entirely on to whom you are talking, how optimistic he is, and how easily he forgets some of the problems that we had.

I have talked recently to engineers who told me how fast they can do certain things. Well, they never did it while the job was going despite all of the pressure that we put upon them. I am sure they cannot do it when they do not have that pressure upon them, and I do not think the foreign nations that do not work as hard as we do, both as to hours and as to industry and effort can catch up with us for some time.

That is really the secret. In other words, we are ahead. They can catch us, but it is going to take them time; it is going to take them effort, and it is going to cost them money. How fast other countries can do it I do not know. I have never been in most of them. I spent the war in Washington.

Mr. MAY. Mr. Chairman, I yield 5 minutes to the gentleman from Tennessee [Mr. KEFAUVER].

Mr. KEFAUVER. Mr. Chairman, in rising to urge acceptance by this body of S. 1717 without the military-participation amendments added in the House Committee on Military Affairs I consider it unnecessary to describe again in detail what we all know to be the almost universal approval of this measure and the principles which it represents, by everyone from President Truman through the Secretary of State, the United States Delegate to the United Nations' Atomic Energy Commission, the Secretaries of War and Navy, the United States Senate, the scientists, outstanding national leaders in all fields, and national organizations, right down to the individual citizen of the United States. I would like, however, first, to clear up certain serious misconceptions which may be obscuring the issue in some minds, second, to deal briefly with those amendments which I believe constitute considerable threat to the welfare of the country, and third, to state the arguments which seem to me irrefutable in the case of civilian against military control of atomic energy.

First, I regret the implication, introduced into this discussion by certain opponents of this legislation, that those young scientists who developed this vast energy source are open to charges of disloyalty, indiscretion, or any form of unpatriotic effort. We all know their record; we know how faithfully the secret was kept through the years of development. We have seen on all sides evidence of their complete devotion to duty and their uncomplaining acceptance of regulations which denied them the one life-giving food of science—that is, the need for discussion, comparison, and stimulus resulting from free, unhampered intercourse with other men of science. Yet, now, we hear from a man, Ernie Adamson, counsel for the Un-American Activities Committee, who knows nothing of science or the scientific methods, that because of these young men, the "peace and security of the United States is definitely in danger." This charge, attributed to the Security Officer at Oak Ridge, and decisively refuted by him, nonetheless is designed to create doubt in the minds of Members of this body and of the people of the United States concerning the patriotism of our scientists.

Irresponsible as is this charge, even more fantastic is the further statement of Mr. Adamson in which he accuses these scientists of being devoted to the creation of some form of world govern-

ment, of being active in support of international civilian control of the manufacture of atomic materials, and of being definitely opposed to Army supervision at Oak Ridge. One is tempted to laugh off these ridiculous accusations—but I do not. For the record, I wish to declare that I do not consider them funny. Whatever the merits of these smear techniques, I am forced to disagree violently when they are applied to the President, the Secretary of State, the Secretaries of War and Navy, the United States Delegate to the United Nations Atomic Energy Commission, the entire United States Senate, and so forth, all of whom have officially and repeatedly endorsed these principles which Mr. Adamson declares make the Oak Ridge scientists open to suspicion, enemies of the peace and security of the United States, traitors to their country.

Incidentally, it might be useful to point out that Mr. Adamson's charges are designed to imply an un-American attitude on the part of these young scientists, and un-American in this sense, we have seen, is another word for "communistic." I would only point out that the principles both of international civilian control of atomic energy and ultimate limited world government are diametrically opposed not only to the official Russian Government position (as demonstrated by Mr. Gromyko on the United Nations Atomic Energy Commission), but also to the party line of the Communist faction in this country. Thus far our chief difficulty, it seems to me, has been that we couldn't convince the Russians of the necessity for real world control of atomic energy.

Let us examine the facts. The scientists, according to their constantly reiterated statements, do want international civilian control of atomic energy. They want it for a number of reasons and one of these is the national interest. The scientists know that there is no long-term secret; they know also that it is only a matter of a few years before other nations can be producing atomic bombs; and they know that there is no adequate defense against atomic attack. Therefore, they reason, the scientists of this country must be left free to continue the work they have so nobly begun, if only, and negatively, to maintain the advantage in weapon supremacy now enjoyed by the United States. But on the positive side, let us not forget that atomic energy has potentialities for peaceful uses, with political, social, economic, and human implication now impossible to conceive. It seems to me almost a truism to say that our decision now, will be a pronouncement to the world. And the world, believe me, is watching, and waiting. Do we put our hopes for peace in atomic energy as a weapon, and turn it over to the military here, thereby making certain the armament race already begun? Or do we leave the development of atomic energy in civilian hands, in scientific hands—always, obviously, with the necessary safeguards for security, with adequate provisions for proper military authority—and proclaim to the world our faith in the future of civilization? This is our choice, this is the decision.

The amendments added to S. 1717 in the House Committee on Military Affairs should be defeated. Among the numerous irrefutable arguments advanced against these amendments, I select only one or two. In connection with the personnel of the five-man commission set up by the bill, the amendment provides that one military man is required, and two may be permitted, to serve on this commission. I maintain that this is in direct defiance of the traditional practices of this nonmilitaristic country. Since 1870 a statute in this country has prohibited a military officer from occupying any position in the civilian government. This statute carried out the fundamental and traditional separation of the military and the state embodied in our Constitution. Why should we now depart, against the wishes of our people, and courting national disaster, from this long-tested principle of democratic government?

Mr. Chairman, I feel that what the House does with this legislation on this occasion may very well determine whether this Nation is going to announce to the world that we want to enter into an armament race in the making of atomic bombs and military use of energy or whether we want to make a sincere effort to see that this great invention which has been developed in this country is used to the greatest extent possible in the upbuilding of the economy of this Nation and for the benefit of mankind. If we want to invite other nations to enter an armament race with us and use this awful invention only for the purpose of making war, then let us vote this bill down.

On the other hand, if we want to state to the world that we are going to develop this release of atomic energy for the betterment of civilization—of course, we will use it for war purposes in case we are forced into a war—but that our primary purpose is to see that it is used for the welfare of civilization, then let us put it under civilian control and try to use it for that purpose. It has been said that this is a very dangerous invention that has been made, and that therefore it ought to be left in the hands of the military. Well, my friends, everything we have in this country—whether it is precious, dangerous, or what not—is, under our system of government supposed to be under civilian control. We have always followed the policy under our republican form of government that policy matters should be handled by the civil authorities. Read the Constitution of the United States and see if the protection of the great liberties we have under our Constitution are placed in the hands of anyone but civilians. Does the Constitution provide that any Members of the Senate and the House shall be military men? We trust and admire our great and efficient military men and insisting upon civilian control is no reflection upon them. It is merely maintaining the spirit of our Constitution.

We are committed to the proposition that civilians shall control the general policy of this great Nation. There is nothing more important that should be controlled by civilians than atomic energy. Does the Constitution provide or do any of our laws provide that certain Cab-

inet members shall be military men? You cannot find any law or any place in the Constitution where the great policy decisions of this Nation shall be made by anyone but civilians. Unless we follow that policy today, we will be departing from the traditional concepts of the founding fathers and the principles enunciated by the Congress since our country was founded.

Mr. MURDOCK. Mr. Chairman, will the gentleman yield?

Mr. KEFAUVER. I yield to the gentleman from Arizona.

Mr. MURDOCK. I regard the gentleman now occupying the floor of the House as a keen student of constitutional government—one of the ablest of our membership.

Mr. KEFAUVER. I thank the gentleman.

Mr. MURDOCK. I endorse all that the gentleman has said with regard to civilian control of the basic policies of Government. The founding fathers intended it to be that way, and I think this proposition of civilian control of atomic energy should be included as in the Senate version of the bill.

Mr. KEFAUVER. I do not think one military man on the Commission or two military men would necessarily sway the decisions that will be made. But I do say that would be a very bad principle for us to start at this late hour in connection with this important matter when the eyes of the world are upon us to see whether we are going to follow our traditional Democratic system or whether we are going to gradually drift toward a military government. If we sanction two military men on the board today making world reaching policy decisions we will be setting the stage for an increase in their authority tomorrow. Furthermore, there is another amendment which ought to be taken out of this bill, and that is the amendment authorizing the armed services to manufacture as many atomic bombs as they desire, with the consent of the President. That is a division of responsibility. If we are going to have civilian control, let us have civilian control. If we are going to say, "We want to have an armament race," and to turn things over to the military, as so many nations have done, then let us do it and let us make it clear-cut one way or the other.

The amendment relative to the manufacture of atomic bombs by the military, with the approval of the President, places no limit on the number they can manufacture. It places no limit on their activities.

Mr. Chairman, there is no need for me to trace for this body the long and careful history of deliberation which produced this bill. There is no need for me to repeat the arguments advanced, both within the Congress and without, for civilian control. Let me say only that here, in truth, the world leadership of the United States faces its most profoundly critical test. We have the bomb; the rest of the world has not. We are responsible, as a Nation, before the tribunals of humanity for its unleashing. Our justification will and must be measured in terms of our national determination that

atomic neergy must never again be used to destroy. At this very moment, our delegate to the United Nations Atomic Energy Commission negotiates with the nations of the world. Mr. Baruch has made known to the war-sickened peoples of the world our official national position. And that position, from beginning to end, rests on and depends upon the principle of civilian control as the only guarantee of peaceful exploitation of this cosmic force. Is it possible that we, the representatives of the people of the United States, should betray our own Government in the eyes of the world, and deny for all time the universal longing for peace?

The CHAIRMAN. The time of the gentleman from Tennessee [Mr. KEFAUVER] has expired.

(Mr. KEFAUVER asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I yield 5 minutes to the gentleman from Virginia [Mr. ALMOND].

Mr. ALMOND. Mr. Chairman, I became a Member of the House on February 4 of this year. In point of service I am the youngest member of the Military Affairs Committee of the House. It is indeed with some trepidation that I endeavor to inflict my views upon this body with reference to this vital subject which concerns the Nation and which concerns the security of the world. Never before in all of the history of humanity has such a serious problem, fraught with more desperate potentialities, been inflicted upon humanity than was done with the discovery of the science of nuclear energy. When that atomic missile parachuted over Hiroshima and blasted out of existence more than 62,000 human beings out of a population of approximately 85,000, this Nation and the world was catapulted generations into the future.

Now, we have this drastic, this terrible, this desperate problem, and it is incumbent upon every Member of this great body to address his or her attention carefully to the proper solution. Under our very system of government, to do anything else except to commit the control and development to a civilian agency would, in my judgment, be a mistake that would not only endanger the future security of this Nation but would endanger our standing before other nations of the world.

As a member of the Military Affairs Committee of the House, I opposed then, and I oppose now, placing this terrific force in the hands of the military. It is inconsistent with our concept of democratic government. We followed the leadership of Eisenhower during the titanic struggle from which we have just emerged. He does not want it in the hands of the military. Secretary Patterson does not want it in the hands of the military. The advice that we received from the Navy Department tells us pointedly that all of those agencies of government are satisfied with the McMahon bill.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. ALMOND. I yield to the distinguished gentleman from New Jersey.

Mr. THOMAS of New Jersey. Does the gentleman from Virginia think that by putting one military man on a commission of five will place this whole thing in the hands of the military?

Mr. ALMOND. I answer the gentleman by saying that under the provisions of the McMahon bill, with the establishment of a military liaison committee, pursuant to the Vandenberg amendment, the military phase of this Government, charged with security and with the responsibility of protecting this Nation, is amply represented.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. ALMOND. I yield to the distinguished gentleman from Ohio.

Mr. ELSTON. I would like to ask the gentleman from Virginia what the military liaison committee is authorized to do that the Army and the Navy cannot do at the present time under existing law.

The military committee is charged with the mandatory responsibility of observation of every single act of the Commission pertaining to the development of nuclear energy as it affects the national security.

The CHAIRMAN. The time of the gentleman from Virginia has expired.

Mr. MAY. Mr. Chairman, I yield the gentleman from Tennessee [Mr. JENNINGS] 5 minutes.

Mr. JENNINGS. Mr. Chairman, Abraham Lincoln once said that when he sent a man to look at a horse he did not want him to count the hairs in the horse's tail but wanted him to make a report on the horse's points.

This is a long bill. There has been a very clear explanation of it made by the members of the committee, and especially by the able gentleman from Ohio [Mr. ELSTON]. I am not going to begin to count the hairs in the horse's tail, but I do want to mention a few undisputed facts. First, we built this bomb at a cost of more than \$2,000,000,000. We are the only government in the world that has it, that has the facilities to make it, the planes to fly it, and the know-how to use it. We do not intend to use it in aggressive warfare. Second, we have proposed to the world that we will outlaw its use and submit it to international control, provided we can be assured that no other nation is making it, or hereafter makes or is in possession of such a weapon. That proposal has been vetoed by the one power that has stalled every effort to make peace in the world. Our proposal has been vetoed in the face of facts that should alarm the people of this country. We have just witnessed the judicial murder of Mihailovitch. We have just witnessed the assassination from ambush of members of our own armed forces. Russia now has two of our officers in prison. We are face to face with danger that is ominous and is imminent. Secretary of State Byrnes, Senator Vandenberg, and Senator Austin have made reports to the American people that are alarming. These facts are known to everybody, and yet we have a bill here that those who support it say is full of iniquities. They tell us it is full of socialism, that it is filled with communism, and is full of contradictions. They them-

selves admit they are adrift on an uncharted sea, on the dubious waves of errors tossed, their ship half foundered, and their compass lost. Yet they propose that we put the cart before the horse in the passage of this measure. We are frightened more than anybody else in the world. And this in the face of the fact that the United States is the only nation that has the bomb.

There is no imminent danger to this country from the use of atomic bombs because we are the only nation in the world that has them. Any person of intelligence who ever went through that vast plant down at Oak Ridge in my district would know that it would be years and years before a backward country like Russia could set up such a plant as that. Now, why get in a hurry about this thing? Why ask a lot of people in to help us keep a secret that up to this time has been kept? If you have a secret and wish to keep it, you keep it. You do not tell about it and ask those to whom you have divulged it to help you keep it.

Mr. HARNESS of Indiana. Mr. Chairman, will the gentleman yield?

Mr. JENNINGS. I yield.

Mr. HARNESS of Indiana. Does not the gentleman believe that a little more delay at least would benefit the United States and the Congress in trying to arrive at some solution?

Mr. JENNINGS. Why, of course.

Mr. HARNESS of Indiana. We are spending millions of dollars out in the Pacific today to test the effectiveness of it.

Mr. JENNINGS. That is true.

Mr. HARNESS of Indiana. And to find out the scientific results of this.

Mr. JENNINGS. I may say that down in Oak Ridge there is a plant being built at a cost of millions of dollars to explore civilian use of atomic energy.

Why get in such a hurry? The trouble is that many of our people are like a hen. When a hen lays an egg she cackles. Every time we do anything we tell the world about it. To use a Texas and Oklahoma expression, we talk too much with our mouths. What do we get from Russia? Let us take our time and not do anything foolish. Why be in a hurry about this thing? We know about it. Nobody else knows about it. Let us stand pat, keep this knowledge to ourselves, keep this bomb and use some common sense. Then when and if the nations of the world agree to our generous proposal to share the secret of the atomic bomb and to outlaw its use in warfare, will be time enough to pass a measure setting up a commission.

The CHAIRMAN. The time of the gentleman from Tennessee has expired.

Mr. MAY. Mr. Chairman, I yield 5 minutes to the gentleman from California [Mrs. DOUGLAS].

(Mrs. DOUGLAS of California asked and was given permission to revise and extend her remarks.)

Mrs. DOUGLAS of California. Mr. Chairman, to me S. 1717 is the most important piece of legislation ever to come before Congress.

Having discovered how to harness the source of the sun's energy, we must now control that knowledge if we are to live to use it.

The controls must be such that they function for peace and express the will to peace. That is what this bill S. 1717 seeks to do and did before it was amended. We have heard much discussion on the floor. Unfortunately we have heard little discussion about what is actually in the bill. I hope when we begin to read it for amendment we will discuss the bill.

In view of what has been said on the floor I want to stress the security aspect of this bill.

The bill was written to give security. Nobody wants to endanger the security of the country or to give away the technological secrets, having to do with the atomic bomb. A half-dozen people on the floor keep getting up and saying, "Everybody wants to give away the secret of the bomb." I do not know to whom they refer—I have heard no one make such a statement on the floor of this House. This bill is expressly written so that these technological secrets may be closely guarded.

Mr. Chairman, security is divided into three parts. There is the temporary security to be found by guarding the secrets of the technological aspects for the making of the bomb which we now possess and to our present knowledge nobody else possesses.

There is another aspect to security. We must keep our preeminent position in science. At the moment we lead the world in science. So that any bill which we write to protect ourselves, must provide for the greatest possible development in science in nuclear fission. We must see that we do not cripple ourselves. We must see to it that we do not lose our preeminent place in science because if we do we are not working toward security. We are building a scientific Maginot line which will be as fatal to us, if we do not secure peace in the world, as the Maginot line was to France.

Thirdly, everyone agrees the President, the Secretary of War, the Secretary of the Navy, the Secretary of State, the Chief of Staff, Mr. VANDENBERG, and Mr. CONNALLY, who have just come back from Europe, that the only completely sure enduring protection which we have against atomic energy being used for destructive purposes in the future is peace.

I had hoped to be able to read to you the facts which the Senate committee asked for and the answers which they found before they wrote this piece of legislation. These facts are very important. They show why peace is the only sure protection that we have. Therefore, the third aspect of security is a strong and harmonious United Nations—international control of atomic energy—peace. We must not write any piece of legislation which will in any way impede the program which Mr. Baruch is presenting to the nations of the world at this moment for the international control of atomic energy, because if we do, then we set ourselves off on a war program and the end of that no one can see.

We should now concern ourselves, only with the fire-engine aspects of atomic energy. We will not have protected ourselves. We have been absolutely foolhardy. So, with reference to

these three aspects, when we begin to read the bill, I ask that you read it with security, our preeminent position in science and peace in mind.

One cannot legislate in a vacuum on atomic energy. There are certain facts of which one must be aware if we are to have a bill which really protects us, if we are to have any security, if we are to have any of the benefits of this cosmic force.

What are these facts?

To get the facts the Senate committee spent six long months asking questions—going to school, studying with the Nation's foremost scientists, with the foremost civilian and military leaders in the country.

What were the questions they asked? The same questions that we are asking on the floor of the House:

First. What had been the real effects of the atomic bombs dropped on Hiroshima and Nagasaki? What are the destructive potentialities of atomic bombs at present and in the foreseeable future?

Second. How difficult had it been to make the atomic bomb? How easy would it be for other countries to make it?

Third. What defense could be devised against the atomic bomb?

Fourth. What secrets did this country hold in connection with the production of atomic bombs? Could these secrets be kept; and if so, how long?

Fifth. What peacetime benefits would come from atomic energy?

Sixth. How was the Manhattan district project run? How had it originated? Who had contributed to it? How could it best be operated in the future?

The full answers to these questions are to be found in the Senate hearings. The Senate public hearings have been printed and are available for all those who have a serious interest in atomic energy.

I only have time here to give a brief synopsis from the Senate findings:

First. The atomic bomb is a weapon of appalling destructiveness. The bomb, and the improvements on it which will certainly be made, mean that another war in which atomic bombs are used will threaten the existence not only of cities and nations but of civilization itself.

Second. Other countries of the world will be able to make atomic bombs. The monopoly which we hold at present is precarious and certain to be short lived. The degree of industrialization of a nation will determine how soon bombs can be made in quantity rather than the possibility of mastering the art of making an atomic bomb, which might be within 5 years.

Third. No real military defense against the atomic bomb has been devised and none is in sight. The destructiveness of atomic bombs is so engulfing that any defense which is not almost literally airtight will not protect our country against devastation.

Fourth. The secrets which we hold are matters of science and engineering that other nations can and will discover. In large part they are secrets of nature, and the book of nature is open to careful, painstaking readers the world over. We can give ourselves a certain temporary protection by retaining the secrets we now have. But that protection grows weaker day by day, and our research

must be vigorously encouraged, supported, and pursued if we are to maintain our place among other nations, to say nothing of retaining our advantage.

Fifth. The peacetime benefits of atomic energy promise to be great indeed, particularly in medicine, biology and many branches of research. These benefits are immediate in their promise but will require extended and unfettered development for full realization. The vast possibilities of utilizing atomic energy as a source of power depend on, 1, further research and development; and 2 study of the economic and international implications of the establishment of plants producing and using fissionable material. In this connection, the point has been repeatedly emphasized that plants which produce power also produce material which constitutes the explosive element of bombs. This fact raises domestic and international issues of profound significance. In other words, people can be producing power for seemingly peaceful purposes while they are actually preparing for war. That is why international controls are necessary.

Sixth. Military control of atomic energy development, though necessary and useful during the war, is a form of direction to which scientists in peacetime will not willingly submit. The continuation of such control will probably discourage further development and research. And on that development depends not only peaceful progress, but the maintenance of a position in the military arts essential to the national defense. On the other hand, the armed services are entitled to extensive participation in this development, insofar as it relates to the military applications of atomic energy. It is their right also to have a voice in protecting the military secrets of atomic weapons.

It turns out that the real protection against the atomic bomb lies in the prevention of war.

Since the only real solution to the whole problem lies in continued world peace, legislation should be directed in specific terms toward that end and should contain a practical expression of our desire for international cooperation.

So state the findings of the Senate hearings from which I have been quoting.

At the same time that these answers to the essential questions were being found, certain steps were being taken toward the international control of atomic energy. For example:

First. The President's message to Congress, October 3, 1945, stressing the necessity for immediate atomic energy legislation and emphasizing the need for an international policy for the control of atomic energy.

Second. The President's letter to the Special Committee on Atomic Energy urging civilian control of atomic energy. Both these messages declared to the world that it was the policy of this great nation to utilize this force toward peaceful ends.

Third. The declaration on atomic energy by the President of the United States, the Prime Minister of the United Kingdom and the Prime Minister of

Canada, issued November 15, 1945, and the ratification of this agreement by the foreign ministers of the Big Three at the Moscow Conference, December 27, 1945.

Fourth. The establishment of the Atomic Energy Commission of the United Nations.

Fifth. The Committee on Atomic Energy set up by Secretary of State Byrnes. As a result of the establishment of this committee, the Acheson-Lilienthal report was written, which stands today as one of the greatest of State papers. It is in the light of this report that Mr. Bernard Baruch made his recommendations to the Atomic Energy Commission of the United Nations. The Baruch report has raised the level of peacetime international discussion to new heights. We should all be proud that it was from this country from which this report came.

We have to believe that the United Nations will soon enter firm agreements for the control and development of atomic energy for peaceful purposes, no matter what the obstacles.

If we do not believe this, then we are dangerously wasting our time. We, the most highly industrialized and therefore the most vulnerable nation in an atomic world should be, in this moment, decentralizing our cities and Congress should stay in session until the blueprints are drafted for a mass migration underground—if we have no faith that international understanding will be realized.

The Senate atomic energy bill, before it was amended, contained no obstacle to our Nation's full participation in the co-operation with urgent international agreements in this field.

In fact, Bernard Baruch urged the prompt passage of the bill, before amended, feeling that it would be a catalyst in his negotiations. It would, he felt, be a pledge of this country's faith in what he was trying to achieve with the other nations of the world.

This bill is predicated on the fact that peace is the only sure protection against the atomic bomb.

Therefore, it expressly states that any international agreements, ratified by Congress, shall take precedence over any conflicting provisions of its own.

The bill modifies itself, in advance, in accordance with probable future international arrangements. This is its flexibility on the international level. This is its adaptation to the shifting shape of the future.

On the national level, likewise, this bill maintains the utmost flexibility, so that it may effectively and intelligently meet the unforeseeable changes that new developments and applications of atomic energy will bring to our lives—in medicine, in agriculture, in the building of new communities and the prolonging of human life.

By its very nature, it is temporary legislation, acknowledging what we do not know as well as what we do know, and making room for new problems, new knowledge, which no one alive can now foresee.

It does this by establishing a Joint Congressional Committee which is required to make continuing studies of

problems relating to atomic energy and to keep the Senate and the House completely informed of these activities.

It is the responsibility of the Atomic Energy Commission established by this bill to keep the Joint Congressional Committee in close touch with all atomic energy developments.

As new atomic devices are developed, Congress is to be advised and has 90 days in which to enact any further legislation that may be needed.

Congress will be kept informed in this particularly efficient way of all the developments in this new field and of the legislative requirements as they occur.

Here is a general survey of the provisions of the bill, without amendments. What the bill does:

It provides for a full-time Civilian Atomic Energy Commission which is to be appointed by the President and confirmed by the Senate. Under this Commission, the President appoints a general manager who is also confirmed by the Senate.

Under this general manager are four divisions; the Department of Research, the Division of Production, the Division of Engineering and the Division of Military Application.

The heads of these divisions will be appointed by the Commission.

The bill provides for a nine-man part-time general civilian advisory committee to the Commission which is consulted by the Commission on scientific and technical matters.

Answering the needs and wishes of the military, there is a special military liaison committee consisting exclusively of representatives of the War and Navy Departments, detailed or assigned by the Secretaries of War and Navy in such number as they may determine. The Atomic Energy Commission must consult and advise with the military liaison committee on all atomic matters which the military committee deems to have military application.

If the military liaison committee objects to any proposal or action the Atomic Energy Commission makes or fails to make, the committee may report to the Secretary of War or of Navy and if either Secretary concurs in the objection, the matter is to be referred to the President whose decision is final.

The Atomic Energy Commission alone will manufacture fissionable materials and bombs.

The amount of fissionable material which will be manufactured and the number of bombs made will be determined by the President in consultation with the Commission and the War and Navy Departments.

It is the stated objective of the bill that the Atomic Energy Commission is to stimulate scientific research in this field to maintain our present preeminent position in the world.

Since only the Government will manufacture fissionable materials the Commission has a first claim on all thorium, uranium, and any other ores from which fissionable materials may be manufactured in the future.

Private patents for inventions and discoveries which are useful solely in the production of fissionable material are ex-

pressly prohibited by the bill. This is necessary because the bill establishes a Government monopoly in the atomic energy field. To delete this prohibition on patents, as has been suggested, would actually defeat the whole purpose of the bill. The patent prohibition not only protects the Government's control of atomic energy production, but also acts as a control of atomic energy information. We must leave the patent provisions as they are if we are to have the security we require to survive.

Ample provision is made in the bill to protect information which at this time would be dangerous to disclose but simultaneously the bill allows for the fullest possible development of scientific research in which, ultimately, our security lies.

To achieve these ends, special sections of the bill are devoted to such considerations as acquisition of source materials, manufacture of fissionable materials, patents on production devices, licenses for equipment, supervision of facilities for production, and the distribution of radioactive byproduct materials so vital to medicine and scientific research.

The bill without amendments covers all the situations in the field of atomic energy that we now know anything about. There should be no amendments at all since we cannot improve the bill intelligently at this time.

If the military amendments are passed the entire concept of the bill will be destroyed.

Having military men on the Commission gives our atomic energy program a warlike character.

To place them there would be a violation of our historical democratic tradition giving control of government to civilians and establishing the Army and Navy as the instruments of civilians for carrying out national policy. Military men are not the policy makers. The President, the Secretary of War, the Secretary of Navy, the Secretary of State who, as well as the Congress, have the responsibility of forming national policy, in relation to any war situation, are all civilians. This constitutional principle is recognized in the statute of 1870, providing that military men on active duty shall not hold civilian Government posts.

The Chief of Staff of the Army, the Chief of Naval Operations, the heads of our War and Navy Departments, and the Chief Executive have expressed their preference that the Commission be composed exclusively of civilians.

Since those most directly concerned with our military security and those who know the most about it want it this way, why should we write more military control in the bill than the heads of the Military Establishments themselves desire?

The four military amendments—the one requiring one member of the Commission to be a representative of the armed forces; the second, permitting two members of the Commission to be representatives of the armed forces; the third, providing that the Director of the Division of Military Application shall be a representative of the armed forces; and the fourth, permitting the Army,

independent of the Commission, to make bombs must be defeated. They must be defeated to remove the characteristics of militarism from this bill and to prove to the world our peaceful intent.

In the eyes of the world, we already have two strikes against us while we make our fervent protestations of peace. It was we who first dropped atomic devastation from the skies—without forewarning. Therefore, when we say we will never do it again, there must be evidence of the validity of our statement.

Secondly, it is we who are experimenting with the death-dealing effects of atomic energy—its uses in war, not in peace—at the very same moment that we loudly contend that atomic warfare must be outlawed.

Are our contentions as loud in the ears of our neighbors as the explosions of the bombs at Bikini?

If, after dropping the bomb in the first place and experimenting with it in the second place, we put military men in charge of our atomic energy in the third place, who is going to believe that we are dedicated to the peaceful exploitation of the greatest miracle of modern man for the benefit of all mankind?

Suppose that one of our fellow United Nations had been first with atomic warfare, had been first to make sensational warlike experimentation with it, and then passed a bill putting its generals in the key position for development and control of atomic energy, what would we think?

What would we do?

Would we believe that nation's courtly compliments to peace? Or would we gear all our science and all our technology and all our industry to the speediest possible production of atomic bombs of our own?

We know that is what we would do, in the fair names of defense or realism.

Let us then, in the names of defense and realism, admit that the extent to which we militarize the Atomic Energy Commission is precisely the extent to which we incite our friends and fellow-nations to an atomic armament race against us.

Let us not become—through fear or fascination or folly—so preoccupied with the fire-engine aspect of atomic energy that we set off the sirens of war and lose all possibility of peace—our only real protection.

As cited by the Alsop brothers in the current issue of the Saturday Evening Post, the chosen experts of the Army General Staff, after great study of the strategic situation of the United States, concluded that "the only sure defense of this country is now the political defense."

This means a strong United Nations. This means international control of atomic energy. This means collective security for peace. You cannot have collective security if you have an armaments race.

This bill—unless militarized—has the vision and the protection which would simultaneously save us from suicide and open up to us the world of which the sages and the scientists of all times have dreamed.

If we are stupid enough to militarize the bill, we can make it into a militaristic mistake, more monstrous than the most publicized blunders of World War II. We can become so frenzied with war fear, suspicion, and hate, and so fixed on a specious security at the expense of scientific freedom, that we would build a Maginot line out of our atomic energy legislation.

This is what might happen if the military guard our sciences. While we built a great fortress full of pill boxes to protect our so-called secrets and sat down behind it with our blinders on, the other nations of the world, expanding their own science and technology, would swarm around its sides and set off explosions that would make Hiroshima sound like the dropping of a pin in the tabernacle.

Security depends finally on the will to peace. The possibility of a future rests in the hearts and minds of men; in their faith in their future; in their expression of their faith to each other.

The bill before us expresses our faith in the future and our faith in each other. It does so, that is, so long as it is free from amendments which would put the precision instrument of peace into the hands of the practitioners of war.

Let us pass the bill unamended—the bill the President wants, the Secretary of War wants, the Secretary of the Navy wants, the Chief of Staff wants, the bill the scientists want because they feel they can work under it.

Let us pass the bill which gives the Army and Navy full scope for the protection of our country, which gives the scientists sufficient freedom to move forward for the security and advancement of mankind which opens the way to international understanding, and which keeps in the hands of our civilian public the traditional democratic rights to control civilian affairs.

Let us pass the bill unamended as our contribution to the peace of the world.

Mr. Chairman, the Members of this House will be interested in the views of some of our most responsible citizens concerning the use of atomic energy:

In international relations, as in domestic affairs, the release of atomic energy constitutes a new force too revolutionary to consider in the framework of old ideas. * * * Civilization demands that we shall reach at the earliest possible date a satisfactory arrangement for the control of this discovery, in order that it may become a powerful and forceful influence toward the maintenance of world peace instead of an instrument of destruction. (Harry S. Truman, President of the United States.)

Improved atomic bombs * * * will be destructive beyond the wildest nightmares of the imagination—a weapon ideally suited to sudden unannounced attacks in which a country's major cities might be destroyed overnight by an ostensibly friendly power.

* * * whether we recognize that atomic bombs will rain upon us or cling to the faint hope that only standard high explosives will batter our cities, we must realize that the time is at hand for the peoples of the world to admit that their warring power is too great to be allowed to continue. Through international collaboration we must make an end to all wars for good and all. (Gen. H. H. Arnold, commanding general, Army Air Forces.)

We have freely accepted the Charter of the United Nations and we recognize the

paramount authority of the world community. * * *

We live in one world, and in this atomic age regional isolationism is even more dangerous than is national isolationism. * * *

Today the world must take its choice. There must be one world for all of us or there will be no world for any of us. (James F. Byrnes, Secretary of State.)

It has already been brought out by all scientists who have worked in this field and have spoken about it that there is no secret of the atomic bomb which can be permanently kept. * * * The laws of nature await discovery by anyone properly qualified and equipped.

If * * * an atomic race develops, I believe the Russians will produce their first atomic bomb in about 3 years. Thereafter, however, there is a definite possibility that the Russians might accumulate atomic bombs at a faster rate than we do. (Dr. Irving Langmuir, associate director of research, General Electric Co.)

Our success * * * was due to great industrial capacity, our freedom from bombing raids, and not in any way to any secret information which we had. (Dr. Reuben Gustavson, professor of political science, University of Chicago.)

The only defense is peace. (Dr. J. R. Oppenheimer, director of the laboratory at Los Alamos, N. Mex.)

Atomic explosives demand not 90 percent, but 100-percent defense. This we do not know how to achieve. (Ivan A. Gettling, professor of physics, Massachusetts Institute of Technology.)

There is no such thing as a specific countermeasure that will prevent the explosion of an atomic bomb or will explode such a bomb while it is still a great distance from its target. * * * There is no defense. (Dr. Louis N. Ridenour, staff member, radiation laboratory, Massachusetts Institute of Technology.)

At the present time we would have to go down (underground) about half a mile to be safe from the explosion and the rays (of an atomic bomb), and would have to go deeper and deeper as more powerful bombs developed, and when we had gone underground we should run the risk of starvation and suffocation through the destruction of our systems of communication and ventilation. (Dr. Robert M. Hutchins, chancellor, University of Chicago.)

As a scientist, I tell you there must never be another war.

Because America is such an industrialized country, with such large populations concentrated into exposed cities, the effect of the atomic bomb will be to weaken America's military position. * * * The bomb is essentially cheap. Compared with the cost of other weapons and their comparative effectiveness, the bomb is the cheapest war weapon in the world. (Dr. Harold C. Urey, professor of chemistry, University of Chicago.)

Science could produce devastation beyond thinking. We must avoid war, not just control an atomic bomb. (Dr. Vannevar Bush, Director, Office of Scientific Research and Development.)

Once a nation builds an atomic-bomb stock pile large enough to demolish the major cities of potential enemies, no more military advantages result from larger stock piles. As time goes on, all nations possessing bombs will tend to become military equals. (Dr. John A. Simpson, metallurgical laboratories, University of Chicago.)

The cost of atomic weapons is not prohibitive. Any nation which can afford an army or navy can afford atomic bombs.

Outproducing the enemy is not much advantage in atomic warfare. Five hundred bombs may be better than 100, but 50,000 are not better than 5,000 because 5,000 would destroy all important targets in any country. Consequently, a small, relatively poor nation

might defeat a larger, richer nation by attacking first.

The production of the first atomic bombs required about 3½ years. Of this time more than 1 year was spent in proving the feasibility of a bomb. Since: (a) All nations possess the basic scientific background and have the Smyth report available to them; (b) many nations possess an adequate corps of trained scientists and engineers; (c) uranium and other necessary raw materials are widely distributed on earth; (d) all industrialized nations possess an adequate plant and background of manufacturing experience; (e) any nation, if willing to make the required financial sacrifice, can afford the necessary monetary outlay; there appear to be no material obstacles in the way of any large industrialized nation, nor, indeed, of several smaller ones, to prevent them from duplicating or surpassing our effort in the production of atomic bombs in approximately the same time. Other nations may well have atomic bombs in from 2 to 5 years. (Atomic scientists of Chicago.)

* * * We are forced to the conclusion that the only defense against the bomb is political and moral, and the only solution to the bomb is a just and durable peace.

What are we to do about peace? * * *

We need a three-way, triple-decker policy—long, intermediate, and short. The long-term program would be directed toward the establishment of world government; the intermediate program toward the support of the United Nations Organization; the short-term program toward the use of diplomacy, public and private, for the reduction of international tension. * * * (Beardsley Ruml, treasurer, R. H. Macy Co.)

The needless withholding of new developments is bound to delay progress in technical fields, and hence to have serious consequences for our national welfare and security.

The disclosure of a great store of new and useful information, however, will stimulate the growth and development of science and industry. It is to this end that we have primarily directed our recommendations.

The minute this information is made public at least one entire new major industry will be born. (Dr. Richard C. Tolman, dean, Graduate School, California Institute of Technology.)

Mr. SHORT. Mr. Chairman, I yield 1 minute to the gentleman from Massachusetts [Mr. GIFFORD].

Mr. GIFFORD. Mr. Chairman, I rise just to say that I am afflicted with indecision, as so many of us apparently are. We are not yet ready to vote for this proposed repository of the greatest and most dangerous secret ever to be entrusted to any group of men. We should postpone action. I have read the hearings, but not as carefully perhaps as I should. I agree with the gentleman from California, JERRY VOORHIS. I also wish that atomic energy could be placed back in the secrets of the universe from which it came. I am so fearful of it. I listened and read carefully the address delivered by the gentlewoman from Connecticut. It was really a remarkable address. She is usually irresistible to me both in personality and argument in how she criticized the bill throughout. She referred early in her remarks to the New Deal jargon in the very preamble. How women can say "No" and mean "Yes" we cannot fully understand.

Mr. SHORT. Mr. Chairman, I yield the balance of my time to the gentleman from Illinois [Mr. ARENDS].

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. ARENDS. I yield to the gentleman from Kentucky.

Mr. MAY. I do not expect to use my 5 minutes, and I do not want to be put in the attitude of deceiving anybody. The gentleman from South Dakota [Mr. CASE] asked me for time, but at the time it was allotted to the gentleman from Texas [Mr. SUMNERS], who now says he does not intend to take it. Does the gentleman from South Dakota desire that time?

Mr. ARENDS. I want some more time, Mr. Chairman.

Mr. CASE of South Dakota. I appreciate the courtesy of the gentleman from Kentucky. I do not know that I need 5 minutes, but I want an opportunity to ask a question.

Mr. ARENDS. Mr. Chairman, I want to direct my attention to the patent section of this bill. This is probably most important to the various Members of the House, and in my estimation it is a very important part of this bill, so I hope you will give some consideration to what I have to say.

Mr. Chairman, as a member of both the Military Affairs and Patent Committees of the House, I have had occasion to give the bill, S. 1717, under discussion long and careful study. I started with the assumption that as an American I had as my primary interest the welfare of the American people, and I am confident that my colleagues on both sides of the aisle will do no less in their consideration of the measure. As Americans, then, let us examine this bill, not in a partisan spirit, but solely in an effort to determine what we are about.

This is a loaded bill. It does not merely provide for policing the production and use of atomic energy. If it were so limited, I would vote for it. By section 11, the bill would also change our fundamental patent policies in a manner to remove the keystone of our technical and economic progress, that is, in a manner to insure a planned and regimented industrial economy in the United States for generations to come.

The first of these objectives is constructive; the second is utterly destructive. It can add nothing to the wealth and prosperity of our country. It can only retard, effectively, the marvelous industrial progress we have made since we were a Government by removing the incentive to invent, shift jobs from American to foreign workers, and break down the American standard of living by mingling it with the international standard of living.

It is not my purpose to defend our patent system, for it needs no defense. It needs only to be understood. Anyone who will ponder for only a moment must realize that the phenomenal industrial progress of this country is inextricably bound up in our patent system and that under it we have developed a talent for industrial growth that has stunned the world. To it we owe the automobile, electrical, chemical, and farm machinery industries which, during periods of peace, have provided jobs for more men and women and at higher wages than any other nation on earth. It has also served us in war. To it we

owe the bazooka and rocket guns, either of which one man can carry and which gives him the fire power of a cannon weighing approximately 20 tons and which enable the Allies to march as on parade across a north African desert against the opposition of hostile enemies; the radar devices which enabled our pilots to hit their unseen targets, no matter how bad the weather; the instrumentalities which enable us to land huge armies on an open French beach and thus avoid the necessity of conquering strongly fortified harbor installations; and the atomic bomb itself. Our planners would change all this.

Without the benefit of any experience whatever in the practice of their theories in this or in any other country, they are perfectly willing to make the interests of our country and its people subservient to a trial of their theories at public expense and to substitute personal government centralized in Washington for our traditional democratic government. They would remake the United States as an incident to remaking the world. Apparently, they believe that their objectives transcend the objectives of ordinary human beings and, therefore, they should not be hampered by the Constitution or by any of the other ordinary rules governing free competitive enterprise. Are these statements too strong? Let us see. I will read from the testimony of Secretary of Commerce Wallace at a hearing held on January 31, 1946, by the Senate Atomic Energy Committee on the bill before the House. He said:

With respect to patents, only the McMahon bill has any detailed provisions; the Johnson and May bills do not deal with this question at any length and presumably would permit private patents both on processes relating to the production of fissionable material and on devices for the use of fissionable material. Since atomic fission may ultimately form the basis of a large part of our economic activity, it is clear that private patent monopolies on critical and key processes should not be permitted. The McMahon bill would eliminate private patent monopolies by requiring sale to the Government of patents on all production processes, and the compulsory licensing with fair royalties to the inventor, of all patents on devices for the utilization of atomic energy. I should like to suggest that with respect to devices essential to the production of fissionable materials, which will be a Government monopoly or at least carried on only under Government license and control, that another method may be preferable. It might be desirable to short cut lengthy patent proceedings by forbidding private patents in this field and authorizing the Commission to purchase inventions directly from the inventor.

With respect to patents on devices for the utilization of atomic energy, the compulsory licensing provisions of S. 1717 seem to me to be essentially sound.

In other words, he would socialize inventions not yet made, as well as those which have been made for the commercial utilization of atomic energy, even those incidentally used in connection with the development of such energy. The bill itself carries out, perfectly, this purpose.

Section 11 (b) of the bill provides that—

No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention

or discovery is used in the conduct of research or development activities in the fields specified in section 3.

And section 3 includes all fields, including industrial uses.

It will be seen, therefore, that the intent is to control the future industries of America. This inevitably would discourage the making of inventions for the industrial utilization of atomic energy by private initiative, enterprise, and capital, and may well result in economic stagnation with consequent widespread unemployment. While we thus retard ourselves other countries may forge ahead in their industrial development by the utilization of this new source of power under a more enlightened policy. As I view the matter, only a country which desires to bring about our economic destruction could think of a better way of retarding our future industrial growth than the restraints we would inflict upon ourselves by the enactment of this bill.

When Mr. Wallace tries to persuade us that the compulsory licensing provisions of the bill seemed to him to be essentially sound, he would have us mire ourselves in the mud of his factless theory. Why does he think the proposal sound? What are his facts? What experiences has the country had to justify his conclusion? The answer is there are none. There has been no more experience in this country with compulsory licensing of patents than there has been with respect to the compulsory leasing of real estate, or the compulsory renting of rooms in our homes, or with forced labor of free men. This share-the-property, or collectivists, theory has been before the House Committee on Patents many times during the past 20 years, and has always been emphatically rejected, often after voluminous testimony.

The trouble with this academic precept is that it is based on the engaging theory of a never changing society. The idea is that our society is static and that whatever private property there is should be equally and freely distributed to everybody, that is, if a man by his own ingenuity and effort has made a new discovery, or has planted a crop in his field, at his own expense, the State should compel him to share it with his competitors. It is only by a little manipulation of that section of the Constitution regarding the taking of private property without due process of law, that such a thing can be done in this country, but when and if it is done, no further discoveries or crops can reasonably be expected because no man in his right mind will make further discoveries or plant new crops for the crows to eat.

There are just two ways, and two ways only, of securing new inventions or new crops. One way is the American way. That way is to provide a profit incentive—a term obnoxious to the collectivists—which makes the wheels go round in this country. The other way is to force men to make new inventions or to plant new crops, and shoot them if they don't. That is the Communists' way. Anyone who takes the trouble to read can learn that under the Soviet law, members of collectives can be punished by death for failure to carry out official

orders, as by neglect to irrigate crops or refusing to plant them. As I have previously intimated, unless we are prepared to adopt a similar policy of providing penalties, we need not expect any further inventions in the field of atomic energy to be made by private initiative, enterprise, and capital when the profit motive is removed.

This insidious attack on our patent system is merely the latest of numerous attacks which have been made in the past. Such attacks are not really attacks on our patent system. They are about the type of economy, the type of government, we are to have in this country. The planners know well that in a planned economy there is no room for a patent system such as ours. They know that if democracy which permits freedom of competitive enterprises is to go, the patent system must go first.

It is no mere accident that this bill is being forced through Congress without any consideration whatever of its patent provisions by the Patents Committee of either House. No opportunity was given either of those committees to consider the measure, notwithstanding its profound implications. These implications are frightening to those best able to judge of their effects. They have been unreservedly condemned by inventors everywhere, as well as by the organized small industries of the country. Likewise, it is no mere accident that the very carefully worded and irrelevant patent provisions of this bill were superimposed on its other provisions and the entire bill then painted the same deceptive color and handed to Congress in the hope it would develop blind spots with respect to such provisions. All that was necessary to be done, if the intent were only to police the production and use of atomic energy and to authorize the Commission to acquire patent rights, was to say so. I wish to point out that the bill itself contains ample security provisions which supplement the various laws, such as the Trading With the Enemy Act, designed to control the unlawful use of technical information, and that such security was obtained all through the war period by the laws now in force.

Mr. MAY. Mr. Chairman, I yield the balance of the time to the gentleman from South Carolina [Mr. RIVERS].

Mr. RIVERS. Mr. Chairman, of course, I would be indeed vain should I think I might be able to change your minds on any part of this bill. At the outset I want to say that as a member of the great Committee on Naval Affairs and in my position as a member of that committee I think we are breaking our necks to do something quite prematurely and something which we should not undertake at this time. This bill should be sent back to that great Committee on Military Affairs. The fact that Henry Wallace urges haste on this thing should be a red light to every Member of the Congress. The fact that he wants it is reason for me not to want it. I want to tell you of an experience that I had along with Members on both sides of the aisle. Some time ago we visited Hiroshima. We saw the terrible destruction of that city. It was totally and completely destroyed. We trod the scorched earth and touched

the seared flesh of those hapless people on whom was visited this terrible, terrible implement of destruction.

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. RIVERS. I am delighted to yield.

Mr. SHORT. Then what a pity and a tragedy it is that we ever dropped the bomb—this great Christian Nation that we boast of.

Mr. RIVERS. I do not agree with the gentleman there.

Mr. SHORT. Japan was at our mercy and wanted to surrender a year before we ever dropped the bomb.

Mr. RIVERS. This was a good thing to bring the war to a close.

Mr. SHORT. Admiral Halsey and all the military and naval leaders said that it was unnecessary.

Mr. CASE of South Dakota. Mr. Chairman, will the gentleman yield?

Mr. RIVERS. I yield.

Mr. CASE of South Dakota. This question has come up two or three times as to why we developed the atomic bomb. There was a time when it could have been pushed back into the test tube, as far as we are concerned. It was 18 months or 2 years before the bomb was dropped, when the Appropriations Committee was considering whether it would appropriate further money for the Manhattan project. We had provided quite a large sum of money and there was not much evidence of results. Some one expressed a fear that if nothing came of the experiment we would be blamed for putting so much into it. We went ahead, however, and the reason why we proceeded to give additional money was because General Marshall came before the committee in secret session and said it was a race against time; that if we did not find the secret and do it first, he was afraid Germany would. That is why the atomic bomb was developed and why we did not stop.

Mr. SHORT. I do not want the House to get the impression that I was against the development of the bomb.

Mr. TRAYNOR. Mr. Chairman, will the gentleman yield?

Mr. RIVERS. I yield.

Mr. TRAYNOR. Would the gentleman believe me when I say that I could name mechanical chemists in Russia now who worked for the du Ponts, who had been there since 1932, building chemical plants for the Russians?

Mr. RIVERS. I would not doubt it at all.

Now, Mr. Chairman, we are breaking our necks to give away this country. It seems that philosophy has gotten hold of certain people. We want to give everything away. We have no aggressive make-up in our being. We know one thing, we are not going to drop this bomb on anybody else. We know that: We have paid for the creation of this bomb and we are today going along with experimentation. We know that. Why go along with PM and the Daily Worker and say it is a good thing to come out and share something that nobody has with them?

Mr. RANKIN. Could the world suffer at all by our keeping the bomb?

Mr. RIVERS. Not at all.

The CHAIRMAN. The time of the gentleman from South Carolina [Mr. RIVERS] has expired.

All time has expired.

The Clerk will read.

The Clerk read as follows:

DECLARATION OF POLICY

SECTION 1. (a) Findings and declaration: Research and experimentation in the field of nuclear chain reaction have attained the stage at which the release of atomic energy on a large scale is practical. The significance of the atomic bomb for military purposes is evident. The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved. Therefore, any legislation will necessarily be subject to revision from time to time. It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life. Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

(b) Purpose of act: It is the purpose of this act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the field; and

(5) A program of administration which will be consistent with the foregoing policies and with international arrangements made by the United States, and which will enable the Congress to be currently informed so as to take further legislative action as may hereafter be appropriate.

Mr. RANKIN. Mr. Chairman, a preferential motion.

The CHAIRMAN. The Clerk will report the motion offered by the gentleman from Mississippi.

The Clerk read as follows:

Mr. RANKIN moves that the Committee do now rise and report the bill back to the House with the recommendation that the enacting clause be stricken out.

Mr. RANKIN. Mr. Chairman, the best thing we can do is to send this bill back to the committee and let it rest there, for the time being at least.

There is no hurry about sacrificing what America has gained in the development of atomic energy. There cannot possibly be any danger to world peace by the United States maintaining its posi-

tion and holding the secrets of the atomic bomb as she has them today. Every intelligent individual knows that America is not going to use this bomb for aggressive purposes. Every intelligent individual knows that the world is safer with this weapon in the hands of the United States than it would be with it in any other hands in the world. If a vote were taken of the entire English-speaking world I dare say it would be overwhelmingly in favor of leaving this atomic bomb exactly where it is, at least for the time being.

There is no hurry about legislation of this kind. You might pick out the average American district and go to the doughboys, if you please, who fought this war, and take a vote on whether or not you should give the secrets of this atomic bomb to those enemies who are seeking to get their hands on it, and you would not get enough votes for it in the average congressional district to wad a shotgun.

We spent \$2,000,000,000 building this plant. The atomic bomb is the greatest weapon the world has ever known. From this time on, marching armies will probably be a thing of the past. The entire procedure of naval warfare is now obsolete. We have this powerful weapon in our hands and it is in the hands of the Military Establishment of the United States and is controlled by men whose patriotism cannot be questioned. We have all the materials necessary, we have the bomb, we have the planes to drop it, we have the know-how; but everybody on earth knows that if this bill is recommended and this proposition left as it is today that the world is safer from war at our hands than it would be from any other nation on earth with this weapon in its possession.

So I am making this motion that we may send this bill back to the Committee for further study.

Mr. BARDEN. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from North Carolina.

Mr. BARDEN. Does not the gentleman believe that we could well afford to put first on our objectives the securing of the peace, and second the distribution of any weapons we may have?

Mr. RANKIN. Absolutely. The gentleman from North Carolina has expressed it in terms that no one can deny. We had better first let the world settle down before we begin to give them weapons to carry on the kind of warfare that some of them are trying to carry on today.

I told you yesterday of the murder of General Mihailovitch at the hands of the Communists in a country he had given his life to defend. We had the leader of his nation stand at this desk and praise him as a great patriot. All over America today there are American boys whose lives he saved when they were shot down in that country. Are we going to turn over to those who murdered him the greatest weapon the world has ever seen? Are we going to turn over to the other nations this power to blow cities from the face of the earth? No. It is in

civilized hands now. Let us keep it there.

God Almighty placed this great weapon in our hands. Let us keep it there at least for the time being. Then we can protect our own country and help to perpetuate the peace of the world.

The CHAIRMAN. The time of the gentleman from Mississippi has expired.

Mr. MAY. Mr. Chairman, I rise in opposition to the amendment offered by the gentleman from Mississippi.

Mr. Chairman, I said in the very beginning of my opening statement on this legislation that I wanted the House to have an opportunity to work its will with respect to what it wanted on atomic bomb legislation. I stated equally emphatically that I was in favor of some sort of military control with respect to the secrets of the atomic bomb. I do not think the House ought to go haywire, so to speak, and strike the enacting clause, making it impossible for the House to work on this bill and do what it wants to do about it.

As I said before, the big issue comes on the very first amendment in section 2. Let me see what this bill declares here in the very first section entitled "Declaration of Policy." After reciting the dangers of the thing involved and the seriousness of the questions involved it states:

Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount—

And I emphasize that word "paramount"—

objective of assuring the common defense and security—

And so forth. Then it provides for the development and utilization of atomic energy for civilian use. You have a bill before you and if you strike out the enacting clause you simply leave things in status quo, whereas, if you continue to debate the bill and consider the amendment which puts the military establishment in some sort of communication with the matter, then you will have done your duty. I think you ought to retain military control to the extent that the committee has done so, but unless you go ahead with debate the bill as is will be left exactly where it is.

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Missouri.

Mr. SHORT. I want to announce to the membership that if the pending motion prevails and we go back into the House, I propose to offer a motion to recommit the bill to the committee for further study, which will be voted upon before the recommendation of the committee.

Mr. MAY. I do not know what the parliamentary situation will be there.

Mr. RANKIN. Let me say to the gentleman from Missouri that if my motion prevails, the bill goes back to the committee presided over by the gentleman from Kentucky [Mr. MAY] for further consideration. The measure will be left there and we will still have the question before us at the next Congress.

Mr. MAY. It is my understanding that if the motion to strike out the enacting clause prevails it kills the legislation.

Mr. HINSHAW. That is my understanding.

Mr. MAY. That is all I care to say.

Mr. HARNESS of Indiana. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Indiana.

Mr. HARNESS of Indiana. After the weeks we spent on this bill, does not the gentleman feel it would be utterly impossible to perfect the present bill in the House? Would it not be better to send this bill back to the committee and to either adopt this or any other amendment or motion than to try to perfect a bill here that has the wrong approach to this whole problem?

Mr. MAY. I would be utterly inconsistent in what I have done heretofore and in what I have heretofore said if I did not take the position that this House ought to legislate on the subject because I have said from the beginning that I felt the House of Representatives would do what it wanted to do about the bill, and would probably do the right thing when it got to it.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from California.

Mr. JOHNSON of California. Every single phrase and sentence in this bill was read thoroughly by the committee and agreed on, was it not?

Mr. MAY. It was argued, it was read and reread, it was considered and reconsidered, it was studied and restudied, and we have done the very best we could. I doubt if we can do anything else.

The CHAIRMAN. The time of the gentleman from Kentucky has expired.

Mr. CASE of South Dakota. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. CASE of South Dakota. Mr. Chairman, if the pending motion should be adopted and the enacting clause is stricken out, would not this bill, S. 1717, be dead? Would not the number be killed?

The CHAIRMAN. If the House agrees to the recommendation of the Committee of the Whole, yes.

Mr. RANKIN. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. RANKIN. It would not be dead. It would merely go back to the committee for future legislation. The whole question would be in the hands of the Military Affairs Committee.

Mr. BARDEN. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. BARDEN. As I understand the parliamentary situation, if this motion prevails, when we go back into the House it would be proper to introduce a motion to recommit the bill back to the committee for further consideration; is that not correct?

The CHAIRMAN. That is correct.

Mr. SHORT. That is exactly what I propose to do.

The CHAIRMAN. When we go back into the House, the House will vote whether or not they want to strike out the enacting clause.

Mr. BARDEN. Mr. Chairman, instead of voting whether or not we want to strike out the enacting clause, will it not be a vote to recommit to the committee?

The CHAIRMAN. After we go back into the House, a motion to recommit would be in order.

Mr. THOMASON. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. THOMASON. Is it not a fact that if the Committee of the Whole adopts the motion offered by the gentleman from Mississippi, we then go back into the House, and if the House approves that motion this bill is dead?

The CHAIRMAN. That is correct.

Mr. SHORT. The bill would be dead, but I am not letting them kill the bill.

The CHAIRMAN. The question is on the motion offered by the gentleman from Mississippi [Mr. RANKIN].

The question was taken; and on a division (demanded by Mr. RANKIN) there were—ayes 93, noes 102.

Mr. RANKIN. Mr. Chairman, I demand tellers.

Tellers were ordered, and the Chairman appointed as tellers Mr. MAY and Mr. RANKIN.

The Committee again divided; and the tellers reported that there were—ayes 102, noes 131.

So the motion was rejected.

Mr. SHORT. Mr. Chairman, I move that the Committee do now rise.

The CHAIRMAN. The question is on the motion offered by the gentleman from Missouri [Mr. SHORT].

The question was taken; and on a division (demanded by Mr. SHORT) there were—ayes 50, noes 107.

So the motion was rejected.

Mr. JOHNSON of California. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. JOHNSON of California: That lines 5 to 11, inclusive, on page 1 and line 1 to 4, inclusive, and the first three words of line 5, page 2, be stricken out.

Mr. JOHNSON of California. Mr. Chairman, the purpose of this amendment is to strike out all irrelevant matter in section 1. In fact, I do not believe in having any statement of policy at all. The purpose of a statute is to lay down a principle or rule of action, and the words used in the law itself indicate what you have in mind without putting in any statement of principle or purposes. However, it seems to be the custom in framing bills to set down some matters of principle or a statement of policy. These things that I refer to are absolutely irrelevant and have no place in the law. For instance, the first sentence says:

Research and experimentation in the field of nuclear chain reaction have attained the stage at which the release of atomic energy on a large scale is practical.

That has nothing to do with the principles involved in this law.

The next sentence says:

The significance of the atomic bomb for military purposes is evident.

Certainly it is evident. It has no place in this law. That is in the very background of this law and is perhaps the reason for it.

The next sentence I want to strike out says:

The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined.

Well, we all know that, and that has no place in the law.

Mrs. LUCE. Mr. Chairman, will the gentleman yield for a question?

Mr. JOHNSON of California. I yield.

Mrs. LUCE. With reference to the statement that the use of atomic energy for civilian purposes upon the social, economic, and political structure of today cannot now be determined, does not the gentleman agree that this bill will determine precisely the political effects upon our society?

Mr. JOHNSON of California. Not necessarily. It will have some effect on our society. But that refers to the effect of atomic energy in our life and in a subordinate way by virtue of the legislation our political and social life may be effected.

The next sentence reads:

It is a field in which unknown factors are involved.

Every one of those statements and the additional sentence, that I need not read, shows clearly that they are not fundamental basic statements of principles or facts. They are merely propaganda. They are merely statements of the evidence. In my opinion, they have no place in the statute at all. What I propose to leave in is a fair statement of principle, so that the section will read as follows:

It is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, and promoting world peace.

I believe those are the purposes for which this law is designed to be carried out, and they are the only ones that have any place in the preamble of this act. It is for that reason that I hope the committee will strike out not only what is proposed in this amendment, but also two additional clauses that I propose to move to strike out in the next section.

The CHAIRMAN. The time of the gentleman from California has expired.

Mr. MATHEWS. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, of all the bills that have come before this House in which the statement of purposes and policies in the act was frustrated by the provisions of the act itself, this is about the worst. I do not have much time. I will hasten.

Why did we become superior with the atomic bomb? Because we were one step ahead and kept one step ahead. Now,

what will this act do? I am not going into theory. I am going into actual facts. The moment this act is passed there is to be a Commission of five persons, to be appointed by the President and confirmed by the Senate. That will take some time. The President has to make a careful selection of a Commission as important as this. The Senate should, and probably will, hold hearings on those appointments. An advisory committee must be appointed. The whole organization must be set up. There must be any number of employees hired. Some of them will have to be investigated by the FBI.

I cannot go into all of the ramifications because I do not have the time, but what happens in the meantime? The moment this act goes into effect every bit of ownership of material goes into the hands of this Commission, which does not exist. What is the manufacturer, the man who has the facilities, going to do? He does not know what to do. The act is so complicated that he will not know what to do with his facilities or with his material for months and months, and probably a year, before this Commission is formed. He cannot take any chances, unless he risks going to jail for 2 years to 20 years or paying a fine of \$5,000 to \$20,000. The net result is that this is not going to promote the development of atomic energy. It will stop it.

As to the patent clause, that adds to the confusion. There will be no incentive for further inventions. It revokes patents even in existence. If a person wanted a new patent there is no incentive for him to get it, because the moment he gets it it will be taken from him. Mr. Chairman, this will throw the whole question of atomic energy into the most unutterable confusion and will create a situation which the very purposes of this act are said to avoid.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. I yield.

Mr. ELSTON. The gentleman said it would take some time for the FBI to investigate the personnel of the Commission. Does not the gentleman recall that recently the Civil Service Commission reported that it did not have adequate funds or adequate personnel to make investigations of civil-service employees?

Mr. MATHEWS. That is right.

Mr. ELSTON. - And would not the net result be that this Commission would be hiring people whose activities are not known?

Mr. MATHEWS. That is right.

Mr. ELSTON. And would that not be an exceedingly dangerous thing in itself?

Mr. MATHEWS. It certainly would, because in a proposition like this the very essence of it is national defense and national security. You must have in that vast organization that you will form only the right kind of people.

Mr. KOPPLEMANN. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. I yield.

Mr. KOPPLEMANN. Does not the gentleman know that the incentive to

inventors and industry is written right in this bill?

Mr. MATHEWS. No; it is not.

Mr. KOPPLEMANN. It is. If you will read it you will see it.

Mr. MATHEWS. I have read it carefully, and I cannot agree with the gentleman's conclusion.

It takes away from all persons any title in or to fissionable materials. It also becomes unlawful for any person except under certain circumstances to manufacture, process or transfer any fissionable material except as authorized by the Commission or export or import fissionable material or directly or indirectly engage in the production of fissionable material outside the United States.

Mr. KOPPLEMANN. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. I cannot yield further. My time is limited. If I can get further time I will be glad to yield.

This is so important, this is so obvious that the moment this goes into effect the whole atomic energy industry of this country will be affected. Every little firm that has a small device or a small quantity of fissionable material will be uncertain as to what it can do and it therefore will do nothing without great jeopardy to itself, and that will continue until this Commission is formed, completely organized, and ready to operate. It will be months, and months, and months before it will issue a single license, and then it can only issue a license after it has made an official investigation. I say it will bring about utter chaos. I hope this bill will be recommended to the committee.

Mr. GAVIN. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. I yield.

Mr. GAVIN. Does not the gentleman believe that this matter should be left in the hands of the War Department where it rightfully belongs?

Mr. MATHEWS. I cannot go quite that far.

Mr. KOPPLEMANN. Mr. Chairman, will the gentleman yield further?

Mr. MATHEWS. I yield.

Mr. KOPPLEMANN. The gentleman's fears are fears only insofar as the protection of inventors and private industry is concerned. If the gentleman will read the bill, however, he will find that inventors are to be paid for their inventions and that industry will receive a royalty on any invention. So they are taken care of and the incentive is there.

Mr. MATHEWS. I am afraid the gentleman has misconstrued my position entirely. The fact that the inventor will, at some unknown future time, have to take an unknown sum determined by a body not yet formed, unless he appeals to a court, which causes further delay, is certainly anything but an incentive to him.

Mr. PRICE of Illinois. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. I yield.

Mr. PRICE of Illinois. If the gentleman will read section 11 of the bill, he will discover that the gentleman from Connecticut [Mr. KOPPLEMANN] was right in his contentions.

Mr. MATHEWS. I have read the bill very carefully and I still cannot agree with the contentions of the gentleman from Connecticut. To say an inventor is protected when he is forced to accept an arbitrary amount for his patent, instead of what he can make from it, as was intended by the patent law, seems to me a strange view of what protection is. And it certainly will not alleviate the confusion private industry will be in between the passage of this act and the organization of the Commission to the point where it can properly issue licenses.

The CHAIRMAN. The time of the gentleman from New Jersey has expired.

Mr. CASE of South Dakota. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I have been trying to find some reason why there should be all this hurry in passing this bill. The nearest approach to a direct suggestion as to why the bill should be passed at this time which I have heard, was in the remarks of the gentleman from Tennessee [Mr. KEFAUVER] and I am not sure that I understood him correctly. So I raise the question. I understood the gentleman to say that if this bill should be passed that we might enter into some international agreement on atomic energy. I want to ask the chairman of the Committee on Military Affairs or some member of the committee whether or not the passage of this bill will make it possible for this Commission to turn over to an international commission some agreement with respect to our handling of nuclear energy.

Mr. MAY. There is nothing in the legislation as I understand it, that authorizes or even directs turning over the atomic bomb to any international organization; but it does provide that on a reciprocal basis there may be exchanges with respect to the civilian uses of atomic energy.

Mr. CASE of South Dakota. But the Commission does not have the power or would not have the power by this act to commit us to any exchange or to control without an approval by the Congress?

Mr. MAY. I think not, undoubtedly.

Mr. CASE of South Dakota. One thing is self-evident; Congress cannot pass any law that is going to bind the hands of other nations. We cannot determine what they do. That was the compelling factor I think when the Appropriations Committee proceeded in its appropriations for Manhattan project. There was a time back in 1944 and early 1945, when some persons were very leery about going any further with the Manhattan project. One member of the subcommittee handling appropriations for the War Department raised the question during our deliberations because he was afraid that if the thing flopped we would be severely criticized for throwing good money after bad. We had then spent over a billion dollars and at least another billion was involved.

As a result of that we had some secret sessions with Secretary Patterson and General Marshall. The one consideration that appealed to us was that if we did not do this Germany might. Everything pointed to their trying to do it, and, as I said a few minutes ago, General

Marshall said it was a race for time. That is the consideration which prevailed and that is why we continued to appropriate money for the Manhattan project.

By the same token we still cannot control what other countries do. That is why I am very reluctant to vote for any legislation which may shackle the development of nuclear energy in this country.

No matter what we do here the scientists, the engineers, the resources of every other country will be devoted to the development of atomic energy. I hope we do not handcuff the United States by any legislation which we propose here.

That is why I would be opposed to any legislation that would place this matter exclusively in the hands of the War Department, or any other single group, on the evidence now before me.

Why is there any hurry right now to pass this bill? I would like to have some real reason for taking action. There may be such a reason. I ask for information.

It has been said repeatedly on the floor here that Members are confused. Several members of the Military Affairs Committee have told us during this debate that they did not know which way to vote.

How, then, can the average Member of Congress, on the basis of the debate that has developed so far, know whether or not we should vote to do anything at this time?

What is the harm in letting things ride a little while? The War Department has these projects under way. The General Electric has taken over operation of the project at Hanford, Wash. General Electric and other organizations are pursuing their research and development. What is the reason for doing anything about this now? I ask for information. We all want to do the right thing in this matter.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. CASE of South Dakota. If the gentleman can answer that question, I am glad to yield to him.

Mr. JOHNSON of California. My answer to that is this, and I do not like to interrupt the gentleman: On October 3 last the President wrote a letter to our committee or to the Congress in which he requested what he called interim legislation, which resulted in the May-Johnson bill, a bill somewhat like this one. He claimed in the letter and by public statements, and witnesses claimed, including the Secretary of War, that this legislation is necessary as a forerunner of the efforts that our State Department is going to make to try to outlaw atomic-bomb warfare.

Mr. CASE of South Dakota. Then the gentleman is more or less supporting the position taken by the gentleman from Tennessee.

The CHAIRMAN. The time of the gentleman from South Dakota has expired.

Mr. CASE of South Dakota. Mr. Chairman, I ask unanimous consent to proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from South Dakota?

There was no objection.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. CASE of South Dakota. I yield to the gentleman from California.

Mr. VOORHIS of California. It seems to me not only is that an important reason for passing the bill now, but it is also true that unless effective domestic control over this admittedly very dangerous proposition is established, there is not any assurance that the whole business will not get completely out of hand at home, rendering it more difficult to enter into an effective international agreement; furthermore, under present circumstances there is nothing in law to prevent the possession of fissionable material by any one or preventing development taking place.

Mr. CASE of South Dakota. This bill does not cover that.

Mr. VOORHIS of California. Yes, it does.

Mr. CASE of South Dakota. No. This bill on page 20 says, "except that with respect to any location, entry, or settlement made prior to the date of enactment of this act no reservation shall be deemed to have been made." That is, existing mining claims are respected. And this bill does not require that the Secretary of Agriculture in administering claims in the national forests shall make any reservation of rights.

So, if it were desirable that all private interests were extinguished, it does not seem to me that this bill does it completely. And certainly it is debatable whether all private rights in the field should be extinguished.

The arguments that have been offered do not seem to me to be persuasive. Why should we create a control commission to put handcuffs on the development of some great new force or power? That is the question I have not heard answered.

I repeat the question, seeking an answer. Why should we handcuff ourselves unless we can have some assurance that other nations are going to handcuff themselves? No law that we can pass here will handcuff development in other countries.

We do not want the United States to get behind in this procession. If private interests are going to be able to develop nuclear energy in other countries, why should they not be free to do so here? I do not think that we ought to adopt a policy of fear here but that we ought to take plenty of time in deliberating on the question.

Every page in the bill carries language giving the Atomic Commission the power to make final determination on one matter or another. Together they constitute the most complete delegation of power to a bureau or agency that has ever been proposed in this country. The character of the problem may give us no choice. Perhaps we have to go the whole way or not at all. But should we set up such a colossus of bureaucracy with all these powers until we thoroughly explore the proposition?

Again I ask, what is the reason for doing this now? I do not seek to argue; I simply want to know.

(Mr. MATHEWS asked and was given permission to revise and extend his remarks.)

TAKE THE PROFIT OUT OF WAR—OUR NATIONAL SECURITY AND SAFETY IS PARAMOUNT

Mr. DOYLE. Mr. Chairman, on yesterday reference was made to a member of the American Bar Association as opposing some of the features of this bill, so I respectfully call your attention to the American Bar Association Journal of May 1946, at page 292 thereof, to an article entitled "One World or None" by Reginald Smith of the Massachusetts bar, "The Need for World Law," and briefly quote as follows:

A symposium on the atomic bomb has been written by 13 preeminent scientists, the Federation of American Scientists, one military man (Gen. H. H. Arnold) and one political scientist (Walter Lippmann). The foreword is by Niels Bohr and the introduction is by Arthur H. Compton, both winners of Nobel prizes.

It is the latest word, in a real sense the last word, on the subject now the most important in the world. Its emphasis is not on how to make the bomb but on how to make some protection for civilization against the bomb. The concluding words are: "Time is short. And survival is at stake."

How much time have we? The answer is given: "We are led by quite straightforward reasoning to the conclusion that any one of several determined foreign nations could duplicate our work in a period of about 5 years" (p. 46).

Being a member of the Patents Committee of this House and also having practiced civil law for about 25 years; having had the benefit and pleasure of drafting very many contracts and licenses relative to patents and patent rights during that law practice, I do not feel as though studying S. 1717 on its patent and rights provisions is entirely a new subject to me. Already in this debate, there has been much emphasis by those who oppose the bill, or by those who want to postpone action and delay legislation or even kill the bill that the business, industrial, manufacturing, and patent interests of this Nation do not favor or approve so-called compulsory license provisions of this bill's proposal as contained in section 11 of the bill.

On yesterday the distinguished gentleman from Texas [Mr. LANHAM] referred to a letter from the chairman of the Patents Committee of the American Bar Association. I have in my hands two letters from the chairman of the Committee on Patents and Research of the National Association of Manufacturers from its office in New York. The first letter to me is dated June 27, 1946, and the second July 16, 1946. That portion of these letters which I here and now quote is exactly the same in both letters. So there has been no change of opinion by the National Association of Manufacturers between the dates of its letter of June 27 and the one of July 16. Furthermore, we have the official opinion of two of the distinguished executives of the National Association of Manufacturers on the same subject for the letter to me of June 27, was signed by Edward Stone, committee executive, Committee

on Patents and Research and the letter of July 16 was signed by R. J. Dearborn, chairman of Committee on Patents and Research. I again call your attention to the fact, that both of these distinguished authorities on patents, and both of them representing this Nation-wide association of manufacturers, take exactly the same position on the same subject of the licensing provisions of this bill. First, subdivision b of both letters is as follows:

(b) The sections on controls of source materials, production of fissionable materials, and Government ownership of all fissionable materials should be changed so as to permit private acquisition, production by private enterprise, and use by private enterprise under adequate licensing provisions by the Commission.

I emphatically call to your attention that not only do they frankly state that the control of source materials of atomic energy should be under Government ownership, but they frankly state that Government ownership should only allow production by private enterprise under adequate licensing provisions by the Commission on Atomic Energy proposed under this bill we are now debating. So, gentlemen, under this section (b), the National Association of Manufacturers recognizes that it is sound public policy and certainly not against the interest of free enterprise or private industry to have the control of the source materials and the production of fissionable materials under Government ownership, nor the rights by private enterprise to use the same subject to adequate license by the Commission representing the American people.

And just as subdivision b, above-quoted, is identically the same in both letters, so subdivision c in both letters is exactly the same, to wit:

(c) Similarly, utilization of atomic energy should be permitted by private enterprise under appropriate licensing.

Therefore, I think it is not entirely sound or accurate reasoning for anyone to claim again in this debate that American industry and American manufacturers are opposed to either Government ownership of atomic materials or of exclusive Government control of its source nor of Government licensing by the Commission proposed. These two paragraphs in these two letters make it crystal clear that the National Association of Manufacturers recognize two fundamental requirements in the interest of national security and safety and in the interests of private and free enterprise development by reason of their position stated in paragraphs b and c, respectively.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. DOYLE. I yield to the gentleman from California.

Mr. JOHNSON of California. Under the situation now prevailing, anybody could make an atomic bomb.

Mr. DOYLE. That is correct.

Mr. JOHNSON of California. We want some way to control it so that private individuals cannot make it.

Mr. DOYLE. I agree with the gentleman.

The objectives of this bill can be properly divided into two sections, to wit:

First, as relates to production and development of atomic energy for military uses. And secondly, for industrial and scientific uses and purposes.

Does anyone disagree with me? Should we let the manufacturers of military arms and munitions and of weapons for use in times of war have the right and privilege of acquiring and developing this God given energy—an asset for the world's blessing—in order to produce munitions of war for the purpose of filling their pockets with more money gained? I say "No!" It is absolutely necessary, sound, and sensible, and in the interests of self-preservation of ourselves and of our world neighbors as well, that no right to produce, control, or use this energy shall be given to any person whatsoever directly or indirectly for the purpose of developing it for arms or military use—unless it is through the Commission proposed in this bill. In this way, we can help to begin to take the motive of money profit out of war. This I believe to be absolutely essential in sound steps to help eliminate causes of war. Under section 4, this bill provides for the exclusive ownership in the United States of all facilities for the production of fissionable material in quantities sufficient to produce an atomic bomb or any other weapon by the Commission representing our beloved Nation, while section 5 provides that any person owning any interest in any fissionable material at the time of the enactment of this act or who lawfully produces any fissionable material incident to privately financed research "shall be paid just compensation therefor." And this bill does not intend to confiscate any private property but, as is necessary for war materials and in the interest of national defense and security, the bill proposes that any person having such material at this time shall be paid a just compensation therefor. This is sound. This is sensible. This is in accordance with American principles of fair dealing. Subdivision (2) of section 5 on page 17 of the bill provides that no person shall transfer or deliver title to any "source material" from its "deposit in nature" except by permission from the Commission. And why not? Again, for purposes of "national security and safety," it is imperative that our Nation be in the exclusive control of the "source of the material" in order to assure exclusive control and access in times of war or for needs of "national security and safety." Does any Member of this House now propose that private money gain or profits shall be placed paramount and above the national security and safety by allowing private ownership and production of this dangerous material at its source?

Mr. McDONOUGH. Mr. Chairman, will the gentleman yield?

Mr. DOYLE. I yield to the gentleman from California.

Mr. McDONOUGH. The gentleman is an attorney, and he knows that the manufacture of firearms or explosive materials in all States is now controlled by statute. There is law now that controls that manufacture.

Mr. DOYLE. Those laws are not adequate to cover this subject. State laws cannot do it.

Mr. McDONOUGH. But there are laws.

Mr. DOYLE. Yes, but inadequate laws—ridiculously inadequate. We must take the profit out of war. Nor is that theoretical, either. I have no objection to my Government being placed in a position of maximum immediate ability to protect the safety and security of our Nation in its new world relationships.

Now, as to section 10, which relates to control of information about atomic energy and without being disrespectful, I really believe that some of the gentlemen who have talked against this section in the bill in this debate had not recently carefully read the full text of that section 10, for it expressly states on page 30 of the bill, as follows:

SEC. 10. (a) Policy: It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy, the Commission shall be guided by the following principles:

(1) That information with respect to the use of atomic energy for industrial purposes should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established.

You will note, gentlemen, that any dissemination of any information is first restricted so as to assure the common defense and security. This, then, is the controlling policy. No; not even any information about it for industrial purposes may be shared or disseminated by the commission, excepting Congress first declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established. The term "Congress," as used in this bill, Mr. Speaker, refers not only to this House of Representatives, but to the United States Senate. What chance does the Commission have to be put in a position of disseminating any atomic energy information for industrial purposes before it should, when a joint resolution of both Houses of this Congress must first be obtained, which clearly declares that enforceable international safeguards against the use of such energy for destructive purposes have been established.

Therefore, it does not appear that the arguments so far made that this Commission will be promptly releasing atomic energy information to foreign nations is well founded. It is in fact without any foundation for under section 10 Congress controls the time and event when any such information shall be shared with other nations on a reciprocal basis. Furthermore, subdivision (c) of said section 10 on page 31 of the bill provides that the Commission is only authorized to establish information service as it may deem necessary as to nonrestricted data. And at line 10 on page 31 it further provides:

(1) The term "restricted data" as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from

time to time determines may be published without adversely affecting the common defense and security.

Therefore, section 10 makes it clear to any who desire to see it that there can be no dissemination of any data for either war or industrial purposes until joint resolution by both of the Houses of the United States Congress has first so declared, and the basis of this joint resolution thus required is that enforceable international safeguards against the use of such energy for destructive purposes have first been established.

Mr. Chairman, this time may come after many years, or it may come before we realize it.

The matter of the patent section of this bill has frequently been mentioned on this floor. It is claimed that the provisions of section 11 will destroy the fundamentals of the American patent system. I disagree with this contention and no man in this House feels more strongly than I do that we must preserve our competitive free enterprise, principles, and economy. But, gentlemen, we cannot perpetuate or preserve that free enterprise as it relates to our patent system if we make it easier than ever for there to grow up monopoly, restraint of trade, unlawful competition, or other restraints against free enterprise and free competitive economy by reason of allowing private or individual ownership and control of this atomic energy through patents in private control. There are four primary functions of a patent system as I understand it, as follows:

A. To induce disclosure of inventions.

B. To induce the investment of venture capital.

C. To promote what has been called enforced diversity of innovation, for instance, where the improvement is already patented, B will be forced to invent a new and different improvement in order to maintain his competitive position.

D. To reward the inventor.

Right here, gentlemen, let me call your careful attention to page 27 of the bill beginning at line 6 to line 22, inclusive, wherein it is provided as follows:

Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results. No license may be given to any person for activities which are not under or within the jurisdiction of the United States, to any foreign government, or to persons within the jurisdiction of the United States where the issuance thereof would be inimical to the common defense and security.

Assuming that no Member of this Congress desires to have any control of this destructive energy in hands of private money profit for war-munitions-making purposes, it is likewise my hope that no

Member is thinking that this energy is a subject of proper monopoly or cartel for purposes of peace. Yet, I do know that in our system of free enterprise the facts have proven that some men get so greedy for material gain and economic power and dominion, that they interpret free enterprise to mean that they can and should be allowed to create monopolies or cartels and restrain free enterprise or competition with their particular business. Free enterprise in the highest sense should be encouraged in this new field of peaceful endeavor. It can be under the terms of this bill. Monopoly must not fasten its hands over free enterprise in the field of peaceful pursuits to be blessed by use of atomic energy.

But slight mention has yet been made of section 15, which establishes a joint committee of the Senate and House which by the terms of this bill is expressly charged with making continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. And not only is this joint committee of Congress so chargeable, but it charges the Atomic Energy Commission with keeping this very same joint committee of the Senate and House fully and currently informed with respect to the Commission's activities. Thus, Congress itself is placed in an intimate and continuing position of full and current contact with the Commission's plans and policies and actions. Furthermore, section (e), on page 47 of the bill, expressly empowers this joint congressional committee to appoint and fix the compensation of such experts, consultants, and technicians and clerks as it deems necessary. So, from our viewpoint, Congress is made a watchdog of the Commission, and in another sense a trustee in the same field as is the Atomic Commission itself—even though to a more limited degree, of course.

So much has been so splendidly said about the place and province of atomic energy from here on and forward in the life of our Nation and the world that I will not dwell at length along the same lines. But you and I are in a new era from which we cannot extricate ourselves if we would. Nor can nations withdraw from a world neighborhood, for in the twinkling of an eye whole cities can now be obliterated. Rifle bullets kill men singly, while atomic bombs obliterate hundreds of thousands of people and crush concrete buildings into dust instantly. Use of atomic energy for peaceful pursuits must come to be the first and only use from here on all over the world—else there will be no survival of civilization. World understanding and cooperation is essential for either national or international existence as civilized people.

(Mr. DOYLE asked and was given permission to revise and extend his remarks.)

Mr. JUDD. Mr. Chairman, I move to strike out the last two words.

Mr. Chairman, I should like to approach this whole subject of atomic energy from a little different standpoint than has been touched upon so far.

Most of the discussion has been about the explosive, the blasting effects of the release of atomic energy. But there is a possibly even more devastating force released in nuclear fission and that is radioactive energy. It so happens I have had considerable personal experience with one form of radioactive energy and bear about in my body the marks of overexposure to it. So I have been interested in it for a great many years.

The physical and biological history of this planet has been one of decreasing radioactive energy. The earth originally was and still is at its center a ball of fire—that is a body gradually disintegrating by atomic fission. The sun supposedly is a body engaged in violent atomic fission. Gradually through the centuries the materials in this earth have been losing their radioactive energy, even as radium constantly gives off radioactive energy until it becomes exhausted through hundreds and thousands of years, and then becomes lead. From the radioactive energy standpoint, our planet so to speak, has been running down since its original formation. It was only when radioactive energy fell below a certain level that it became possible for vegetation to grow on the planet, and then after more millenniums of running down the level of radioactive energy was low enough so that animal life could exist.

As many of you know, I am sure, radioactive energy can have a special effect upon germ cells, the cells that bring into being new life, a new organism. It can cause internal changes in germ cells which produce mutations, sports, or biological monsters. Thus the period when radioactive energy became just low enough to permit animal life, but was still high enough to act on the chromosomes in germ cells, was the period when dinosaurs and all sorts of bizarre biological freaks inhabited the earth—a period when great varieties of new species appeared. Doubtless it was one of those mutations that produced the new species, man.

In the beginning, God created the heavens and the earth, and all that live therein. Perhaps it was through the operation of His radioactive energy that He produced all that live.

In any case, here we now are after all the millenniums. There has been one steady process of gradual exhaustion of the radioactive energy stored in the earth in a form which was released naturally.

Now for the first time in man's history he has discovered how to release radioactive energy artificially. This is a reversal of the direction in which physical processes on the planet have been going since its formation. It involves profoundly not just this Nation but life itself from the standpoint of sheer existence.

Hitherto most of the radioactive energy we have had was that which we discovered already active in such elements as radium. We could use what existed. Now we have found a way to increase the amount in existence, a way to release new radioactive energy.

Heretofore it has been gradually dying down; now we can start building it up, in active form and at a terrible rate.

This can mean far more to us ultimately than just the blasting effect of bomb explosions, destructive as they are.

If too much radioactive energy is released in an uncontrolled form, what may it do to human life itself; in fact, to all life?

Incidentally, I have been told that the reason they had the Hiroshima bomb go off about 1,500 feet in the air instead of closer to the ground was that they wanted only the blasting effect and were afraid of the possible radioactive effect. If it exploded high in the air, most of the radioactive particles would be carried miles high and dispersed. If it went off too low down it might spread over the area so much radioactive energy that the land would not again support even plant life, to say nothing of animal life. No one yet knows. To find out is one of the great tasks with which this Commission is to be charged. That is why we want the greatest scientists and statesmen on it. We want to know the possible uses of atomic energy in military weapons, in industry and commerce, and in medicine. We also must make sure that radioactive energy is not released in such forms and quantities that the surface of the earth returns to where it was ages ago. One or the other of two things would result, extermination of all life or, in an intermediate stage, drastic effects on germ cells of species which have long been stable, so that mutations would result, and the human being as we know him be changed to a biological sport, or a freak of some sort, other than the freak he already is at times.

I do not know whether I have been able to make clear what I have in mind and my great concern lest we bungle the handling of this great power with truly cataclysmic results. This is the only reason I would consider giving any commission such monopolistic power. It is the chief reason in my own mind which requires that we set up this Commission for controlling the development of atomic energy for civilian use as well as for military use.

Several Members have said they want to have everything under military control. Others have said they do not want to have anything under military control. I do not think either of those extreme positions is tenable. This force has enormous significance for our industry and our economy. It has terrible implications for civilian life, as well as for military security. We have to deal with both of them in a reasonable sort of balance. I do not see any better way to handle this titanic power than to put it under the control of a commission of truly great men who will have available the knowledge and services both of the military and of the civilian scientists who are acutely aware of all the dangers I have mentioned and more. They developed this process; they have lived with it day and night for years; they see far-reaching implications which we in our debate as to what the Bikini explosion means to the future of our Navy do not adequately appreciate. I do not know any safer hands in which to place it.

Mr. VOORHIS of California. Mr. Chairman, I move to strike out the last

two words. What the gentleman from Minnesota, himself an eminent physician, just said, only underlines the importance for the time being and until people know something about what atomic energy is and will do, and until such time as nations have grown up sufficiently in their international relationships to control it, what the gentleman has said only underlines the necessity of effective controls over this thing during the period that lies immediately ahead.

Mr. JUDD. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield gladly.

Mr. JUDD. This is the only possible justification, if there is an adequate justification, for the patent provisions of this bill.

Mr. VOORHIS of California. I agree with the gentleman that it justifies that section.

Mr. JUDD. Because if we knew more about atomic energy, and if we knew what the effect would be on human lives as well as in war, we could not have section 11. I am not sure that we can have it even so. But this is the only justification until we do know more of what the ultimate significance is and we dare not allow anybody at their own will to begin experimenting out in their own back yards. Our very existence does not permit us to allow it.

Mr. VOORHIS of California. I agree with the gentleman. I think there is another reason for the patent provisions. At least, it will prevent the private monopolization of a thing so fundamental and so revolutionary as atomic energy. I believe that would be wrong—morally wrong and economically wrong. I am not talking about applications of atomic energy, but I am talking about the patent on fissionable material itself, on the very energy itself.

I want to make this first point, that the bill does provide, and I quote: "That the Commission is authorized and directed, to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this act."

It will give the possibility of control over sporadic, dangerous uses of atomic energy, just as the gentleman from California suggested a while ago.

Mr. CASE of South Dakota. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield.

Mr. CASE of South Dakota. Assuming that that control were desirable, if it could be obtained, how does the gentleman propose to establish control in Argentina, in Spain, or in Russia, or in any other part of the world other than the United States?

Mr. VOORHIS of California. That is precisely what we are attempting to do through the Baruch proposals. Further answering the gentleman, the gentleman makes the point that he did not want us to block our own development while other nations had not agreed to any type of international control. I am in full accord with that. I would not be in support of this bill if it were not for the

fact that all of the testimony of every reputable scientist that I know of is to the effect that under the terms of this bill atomic-energy development will be encouraged in the scientific field where it is all important. That testimony has been given over and over again. It is true that that development is safeguarded in certain respects. It is true there are controls more far reaching than the Congress would authorize under any other circumstances. Those who seem to feel that atomic energy is comparable to natural gas or firecrackers will find it hard, naturally, to understand. But those who have at least an inkling of what this energy is will know why it is necessary that there be control of private development and regulation of the possibility of anyone going out and dealing with fissionable material as he sees fit. I personally think such control absolutely essential for the time being if the national interests are to be effectively protected, but I am convinced that the passage of this bill will make much more possible than it is today the continuance of atomic-energy development in the United States and that it provides the only way that can be done. May I say further, it disturbs me very much to find some people who are concerned about the preservation of what they term the secret of the atomic bomb, arguing in the next breath that atomic energy itself should be patentable under which circumstances the patented devices and the patented processes have to be made a matter of public record in the Patent Office. It does not seem to me that those two things possibly can be fitted together. I think this bill goes as well as it can down the middle of the road, providing for the kind of control that is necessary under existing circumstances and on the other hand, assuring provision for the continuance of scientific development.

Mr. CASE of South Dakota. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield.

Mr. CASE of South Dakota. Does not the gentleman feel that the agreement for international control should precede our handcuffing of our own research and development?

Mr. VOORHIS of California. I do not think we are handcuffing our own research and development. I think that it is severely crippled for the want of legislation precisely like this. Most of our scientists have left the project. I believe they will return if this bill is passed. Obviously, it is most important that they do so. I believe further that American leadership in working for international control now is most important. Indeed, it is the only leadership there can be. I think it necessary that this Congress rise to a plane of vision where it can see that our country, after all, is the sole possessor of this thing and has the responsibility and opportunity of leadership for the possibility of peace, and unless the structure of peace is built there can, as other speakers have said, be no safety for anyone, anywhere. It seems clear to me that adequate domestic control must precede, not follow, international control.

The CHAIRMAN. The time of the gentleman from California [Mr. VOORHIS] has expired.

Mrs. ROGERS of Massachusetts. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I rise to ask the gentleman from Minnesota, Dr. JUDD, a question, if he will answer it, as he has had experience with overradiation. I would like to ask the gentleman if he does not feel that it is important to keep the Army, at least in a measure, in control for the time being. It seems to me the Army did an amazing job in protecting human beings during the Manhattan project. I would like to have that protection continued; also, the military forces are responsible for the security and protection of America. They are the ones who follow constantly the danger to our country.

Mr. JUDD. I think it has done a magnificent job in protecting all those who were working on that project. As you know, there was a great corps of physicians meticulously checking every process in the whole project. On the other hand, we cannot sit down and say that because we have achieved this high stage of development in atomic energy nobody else has caught up or will catch up with us. We ought to move ahead, and we are going to move ahead, in its development for civilian use, as well as military.

The two should be integrated and carried on together. The bill protects the military aspects, but does not keep it solely under the military. It will enable those working with it for civilian purposes to have the benefit of the knowledge and experience gained in the Manhattan project. It was civilian scientists who were responsible for most of this excellent protective work done by the military. I believe the military need to have their share in the work and the civilians have their share. I think on the whole the bill achieves that general integration and balance.

Mrs. ROGERS of Massachusetts. But who would have the last word?

Mr. JUDD. The last word would be with the military of course.

Mrs. ROGERS of Massachusetts. But not in this bill, as I understand it.

Mr. JUDD. Yes; it can go to the President. The Military Liaison Committee, which has access to all the information, can always appeal to the President, if it is not satisfied.

Mrs. ROGERS of Massachusetts. I am very much afraid, if the military does not have control, that the President will side with civilians. It may be hard for the military to place the security angle before him. It will give enormous power to any civilian board—power for evil as well as power for good. I am very much afraid of it.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mrs. ROGERS of Massachusetts. I am glad to yield. I am seeking information.

Mr. MAY. I wanted the lady to yield to me that I might ask the gentleman from Minnesota, Dr. JUDD, a question.

Mrs. ROGERS of Massachusetts. I yield.

Mr. MAY. The gentleman from Minnesota made the statement in his most excellent address that there ought to be reasonable balance of control between the civilian and military aspects of the problem. May I ask the gentleman if the provision which the House committee wrote into the bill providing for some sort of military control, would be a reasonable balance on that subject, with the provision for letting it out to laboratories and so forth.

Mr. JUDD. Yes. I also think it is adequately taken care of in the original McMahon bill. I expect to vote to strike out the committee amendment. On the other hand, if it stays in I do not think it makes any great difference.

All members of the Commission will be serving first of all as Americans and I cannot believe that any damage would be done by having one or two members of the military forces on this Commission. On the other hand, I cannot believe any damage would be done by having them all civilians with the Military Liaison Committee also on the job. I do not think that is the really great consideration here, although it has been made the chief bone of contention. I think the great consideration is to see that we begin to get progress in an integrated, balanced way between the military and civilian uses of atomic energy.

Mrs. ROGERS of Massachusetts. I wish to say that I have always found the Army and Navy extremely anxious to allow civilians to get the advantage of any of their developments. Recently in the matter of prosthetic appliances, Secretary of War Patterson has done a magnificent job in connection with civilians who are working with artificial arms and legs. In 2 years some of the experimental prosthetic appliances I hope will be perfected. That is one of the reasons why I am so anxious to have automobiles for the amputees to allow those veterans a couple of years in which they may get about before artificial legs are perfected. That is just one instance—and there are thousands of others—where the Army and Navy were very anxious to cooperate with civilians. They have given Army and Navy orders to many civilian firms, and have sponsored great inventions in such things as radar, robots, and so forth. I, for one, am duly grateful to the Army and Navy for their scientific work.

The CHAIRMAN. The time of the gentleman from Massachusetts has expired.

Mrs. ROGERS of Massachusetts. Mr. Chairman, I ask unanimous consent to proceed for one additional minute.

The CHAIRMAN. Is there objection to the request of the gentleman from Massachusetts?

There was no objection.

Mrs. ROGERS of Massachusetts. I should like also to ask the members of the Military Affairs Committee if there has been anything in connection with the United Nations Organization that would set up a commission, that would handle the exchange of military secrets among the nations? I think it is a very pertinent question. Why should we do

it in the matter of this and not all other military secrets?

Mrs. LUCE. Mr. Chairman, will the gentlewoman yield?

Mrs. ROGERS of Massachusetts. I am very glad to yield, for I want all the information I can get.

Mrs. LUCE. Anyone who has followed carefully the Baruch proposals and the comments in the press by experts in that field realizes that there will be set up in UN a framework for the control of all forms of heavy armaments and weapons, including the atomic bomb which in effect does mean that if that control works, all of our military secrets will probably be shared; and as further proof of that you will find in the Lillienthal report or rather the Acheson report on the atomic bomb that such is the intention of the authorities.

Mrs. ROGERS of Massachusetts. Again I say apparently the so-called friendly nations will be given all our secrets. Truly this measure is starting an endless giving to other countries of our resources besides our loans and gifts of money. We shall be an impoverished Nation.

The following is the letter from Col. Robert S. Allen who has done such dynamic work in prosthetic-appliance development. The amputees in the service and civilian amputees owe him much. He is the chairman of the advisory board of the Prosthetic Appliance Service under Assistant Director of the Veterans' Administration Walter Bura. Both the gentleman from Pennsylvania and I are members of that board.

WASHINGTON, D. C., July 15, 1946.

MY DEAR MRS. ROGERS: Through the kindness of Judge Patterson, Secretary of War, I had the opportunity to attend the July meeting of the Committee on Prosthetic Devices. The meeting consisted of two sessions, a symposium in San Francisco and a visit to the Northrop prosthesis laboratory in Los Angeles. This letter is a brief report on my observations.

I was tremendously thrilled and inspired by what I saw and heard. At the San Francisco symposium I saw the artificial arm developed by Northrop, which unquestionably is the best device of its kind in existence today. It weighs about 2 pounds, with the hook, has an automatic elbow-locking mechanism, and is a great advance over existing artificial arms. It is already being distributed to Army amputees, and a project has been initiated under which the United Drug Co. will undertake the marketing of these devices at cost to all arm amputees, civilian as well as military. Northrop also has begun work on a mechanical hand to replace the unsightly hook. This is still in the early stages, but on the basis of the outstanding results already achieved by the company, I am sure that in the not-too-distant future they will produce an efficient and practical artificial hand.

Northrop also has developed an artificial leg with a suction mechanism. This mechanism is a German device. The Germans have been using a suction leg for some 10 years. Northrop is now applying it to American climatic conditions and, on the basis of its preliminary experiments, is confident that it can produce a workable suction leg in a relatively short time. The advantages of such a prosthesis are obvious. It would eliminate the cumbersome and trying harness now necessary and be a great boon to the leg amputee.

In addition, several other concerns, working under contracts from the committee, have made considerable progress in develop-

ing a self-locking knee. Northrop has a device of this kind already in use by test pilots with very good results. There is no reason why in the next 12 months these projects should not develop a reliable and practical self-locking knee. This device combined with the suction mechanism should give the leg amputee an artificial limb that would be a tremendous advance on anything now in existence.

The most exciting and stirring demonstration at the meeting was an electrical arm produced by International Business Machines Corp. This was only a mock-up model; actually, only a few days old. That is, it was completed only a few days before the meeting. It is still only a promise. But it is a tangible promise that bears every hope of full realization in a matter of a year or so.

The basic essentials of this device, the motor and batteries, are available. The problem now is merely of developing the prosthesis to the point where it is durable and can be produced in quantity at a reasonable cost. The model weighed about 4 pounds and the engineers were confident that they could bring this down to 3 pounds. The whole mechanism is revolutionary in design and operation. Instead of hanging on the stump, it rests on a cradle that extends from a belt around the waist. This not only eliminates the onerous feature of dead weight hanging from a stump, but also gives the wearer complete freedom of shoulder movement.

The committee also has a number of studies under way. One of the basic motions of the leg by the University of California, and another by UCLA on the arm and hand. These studies already have been extremely useful to the contractors and I am sure will be increasingly so as they develop new facts and data.

All in all, as I said, I was tremendously inspired and heartened by what I saw and learned. I have every confidence that if this research and development work is continued without hitch for another year or so that truly modern and scientific prostheses will be evolved. The important thing now is continuity; that is, to insure that the work of the committee is continued without hitch or impairment. That is the crux of the whole situation and that is the thing on which everyone interested in this field must concentrate at this time. I have made a few recommendations to Judge Patterson toward this end and I have every belief that these suggestions will be instituted. They call for no radical departures but are implementations which members of the committee feel would greatly assist their work.

With warmest personal regards.

Sincerely,

ROBERT S. ALLEN.

The CHAIRMAN. The time of the gentlewoman from Massachusetts has expired.

Mr. AUGUST H. ANDRESEN. Mr. Chairman, I move to strike out the last three words.

Mr. Chairman, I am not a scientist nor do I claim to be one. We are being advised today however, by a good many individuals and groups who are not scientists but who claim to know all about atomic energy and demand from us that we should pass certain legislation on the subject. They know very little about it, probably less than we do who are seeking the true and the best solution to handle atomic energy for the general good. As I see it, the thing that should come first with all of us is the question of the security for our country.

Up to about 2 weeks ago I thought that I would support the McMahon bill. It seemed to me that was a good measure and that to turn control of atomic en-

ergy over to a civilian commission might be the best plan, but after hearing the debate and talking with members of the Military Affairs Committee and also talking to certain members of the FBI, I have come to the conclusion that it might be better for the safety of our country to delay action on the pending bill until matters among the allied countries reach a more satisfactory conclusion.

We are given some information from behind the iron curtain as to what is going on and we know that the world situation in our effort to secure peace is not progressing satisfactorily. We also learn that there are thousands of foreign agents running loose throughout the United States who are working to get all the secret information they can on the atomic bomb so they can pass it back to their respective countries. I doubt very much if our agents are having the same freedom in some of the Allied countries as we are giving foreign agents sent over here to the United States. I am not naming any countries. You may draw your own conclusions.

Mr. Chairman, I do not see any particular harm in delaying action on this legislation for 3 or 4 months or until a peace treaty is written. We have been running along from the beginning of time—I do not know how long it is, whether it is 9,000 years or 100,000,000 years—without any knowledge on atomic energy. Now, what harm can there be if we wait 3, 4, or 5 months until there is a peace conference to determine whether or not the nations of the world can work together on a peaceful basis before we go into this matter of turning deadly secrets over to any group? The larger the group the easier it will be to divulge the secrets to some of these organizations or countries that are so anxious today to get hold of them.

I have a high regard for scientists. There are many good Americans among them, probably all of them are good, patriotic Americans that will be on the commission, but I also know some scientists in our country, in the United States, who are as red as you can make them. If they were to get any information about atomic energy, I know that it would go outside the United States just as quickly as they could hand it to some agent who would be willing to pass it along.

When conditions become settled in the world, especially between the Big Three nations, we can begin talking about sharing our atomic secrets with scientists, and until that time occurs, I strongly believe that it will be in the interest of our national security to leave matters as they now stand. A few months delay in turning the handling of the secrets of atomic energy over to a civilian commission, will not retard human progress.

Speaking for myself, I am unalterably opposed to sharing the secrets of the atomic bomb with Russia or any other country. The safety and future security of the world will depend upon our retention of this destructive force and the know-how to produce it. I do not believe it will be in the interest of peace for us to make the secret available to any country.

I may support the McMahon bill for the control of atomic energy, when conditions become more settled in the world, but for the time being, I suggest that no legislation be considered until after the peace conference.

The CHAIRMAN. The time of the gentleman from Minnesota has expired.

Mr. HERTER. Mr. Chairman, I move to strike out the last seven words.

Mr. Chairman, throughout this whole debate all those who have spoken have admitted very freely and very frankly that they were confused, that they were not in full possession of the so-called secrets that all of us feel should be zealously guarded in this country, and that because of this confusion and uncertainty, and in many cases a very real fear that the secret will be divulged to those who might use it badly, they argue that all legislation ought to be postponed. I cannot agree with that point of view. I have not any more information than any other Member of this House, but when reaching a final judgment on this subject it seems to me we ought to give some consideration as to where this legislation originated, and who the individuals are who feel it is desirable that we pass this type of legislation.

The individual principally involved in the drafting of the original May-Johnson bill was Mr. George Harrison, president of the New York Life Insurance Co., formerly president of the Federal Reserve Bank of New York, who worked for 2 years as personal assistant to Secretary Stimson and sat as Mr. Stimson's alternate delegate on the Board that recommended this legislation. He was representing a hardheaded, practical point of view as to why the control over this newly found power should be put into the hands of a civilian commission. Working with him were the two men who did more to develop the scientific coordination that made possible the building of the bomb than any two others, namely President Conant, of Harvard University, and President Compton, of the Massachusetts Institute of Technology, both of them very distinguished scientists in their own right.

The recommendations of those gentlemen, which led to this legislation that we have before us, were, as I said, based on the fundamental thesis that we are now embarking on an era of scientific rivalry where all nations are trying to get ahead in this particular matter. Testimony has been given that the development of the bomb did not come from a single new scientific discovery; that everything scientific about it was known before the war period; that the development of the bomb came entirely through the development of technological processes for putting that scientific information into effective use.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. HERTER. I yield to the gentleman from California.

Mr. JOHNSON of California. I thank the gentleman for that statement. That is exactly the idea that General Groves expressed to us at the very first hearing on the May-Johnson bill, only he elaborated on it a little more. But it is the

same idea that the gentleman expresses here.

Mr. HERTER. There is no question in my mind about it that if we are really interested in the security of this country we have to do everything that we can to encourage our scientific people to devote their energy toward seeing what further progress can be made in this particular field until satisfactory international controls have been developed. To my mind, to delay, or not to enact any legislation—and I am not worrying too much about any amendments to be offered; I am merely speaking of some form of legislation—at this moment, is playing with our security rather than enhancing our security.

Mr. CASE of South Dakota. Mr. Chairman, will the gentleman yield?

Mr. HERTER. I yield to the gentleman from South Dakota.

Mr. CASE of South Dakota. In what way does this bill offer inducements for private research or scientific research that would not exist without the bill?

Mr. HERTER. It does this: This particular Commission will have control through license of all fissionable materials, but at the present time, under War Department controls, General Groves, or whoever the responsible official may be, cannot divulge anything that he has got, nor can he allow the scientists of the country to use fissionable material to experiment with. Today the War Department, under existing regulations, is extremely tight. But the minute the war is over, from the point of view of the realistic situation that we are up against here, the controls that the War Department has over this thing disappear like that, and you have an absolutely free field in this country which is not covered by any peacetime legislation.

The CHAIRMAN. The time of the gentleman from Massachusetts has expired.

Mr. THOMAS of New Jersey. Mr. Chairman, I ask unanimous consent that the gentleman be permitted to proceed for one additional minute.

The CHAIRMAN. Is there objection to the request of the gentleman from New Jersey?

There was no objection.

Mr. THOMAS of New Jersey. The gentleman said that the War Department at the present time—he mentioned General Groves—did not have any right to permit any experimentation and give out any secrets. The gentleman is absolutely wrong about that. At the present time industrial experiments are being made, and much of that information has been given out.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. HERTER. I yield to the gentleman from Ohio.

Mr. ELSTON. As a matter of fact, the testimony before the Committee on Appropriations given by General Groves was to the effect that the War Department is giving out whatever may be needed by industry to develop atomic energy for industrial purposes.

Mr. HERTER. That may be very true. The War Department at the moment, under war powers, has control of

this situation. The minute those war powers are over, that control is gone.

Mr. CASE of South Dakota. Mr. Chairman, if the gentleman will yield further, what would be wrong with such a situation? I am asking for information. Is that not a situation that is going to obtain in every other country? Is there any control or restriction upon the use of atomic energy in other countries? Or at least any that we can dictate?

Mr. HERTER. There is absolutely no control that I know of.

Mr. CASE of South Dakota. Why should we have restriction in this country when it does not exist in other countries?

Mr. HERTER. I feel that this is an orderly expansion of research.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. HERTER. I yield to the gentleman from Connecticut.

Mrs. LUCE. I think perhaps the gentleman excepts totalitarian countries when he says there is no control of research in other countries.

Mr. HERTER. I meant to say no restriction of research in other countries. I think certainly every country is doing everything it can to encourage its scientists to work as hard and as fast as they can in this particular field; in fact, they are making very large grants of money in every country, I think, for the development of this field.

Mr. CASE of South Dakota. I certainly would agree with the gentleman that the War Department should not have permanent control. I do not believe in that. However, we ought not to handicap ourselves when other nations do not.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on pro forma amendments to section 1 do now close, and that bona fide amendments to the section be reported for discussion.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

The CHAIRMAN. The question is on the amendment offered by the gentleman from California [Mr. JOHNSON].

The amendment was rejected.

Mr. FULTON. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. FULTON: On page 1, line 4, after "Section 1. (a) Findings and declaration", strike out the remainder of paragraph (a) and insert: "It is hereby declared to be the policy of the people of the United States that the development and utilization of atomic energy shall be directed toward the public welfare and increasing the standard of living of all peoples, and for the promotion of world peace, including assuring the common defense, security, and protection of all peace-loving nations."

Mr. FULTON. Mr. Chairman, this amendment is to make a restatement of the declaration of policy found at the beginning of the bill. If you look at the declaration of policy as we now have stated in the bill you will find that it is nothing but pious platitude. Read it with me:

Research and experimentation in the field of nuclear chain reaction have attained the

stage at which the release of atomic energy on a large scale is practicable.

It would take a fool not to know that is true.

The significance of the atomic bomb for military purposes is evident.

If it is evident, why do we say it? To me, legislation should be passed for a particular purpose with a policy definitely stated. We should not in legislation keep repeating things that are self-evident and are mere drappings.

I read further:

The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined.

Of course that is true. If we need anybody to tell us that it surely ought not to be in a measure cluttered up with things like that.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. FULTON. I yield to the gentleman from California.

Mr. JOHNSON of California. Does the gentleman realize that the Committee of the Whole voted just a few minutes ago to retain that language in the bill and turned down the amendment I offered to strike it out?

Mr. FULTON. I am putting something else in its place.

Mr. JOHNSON of California. I wanted to put something else in its place. Let me tell the gentleman what happened.

Mr. FULTON. I realize what happened, but the question is, should this be substituted when the gentleman's language was not accepted?

Mr. JOHNSON of California. I will vote for the gentleman's amendment. I think it is all right.

Mr. FULTON. I thank the gentleman. [Reading further:]

This is a field in which unknown factors are involved.

I agree with what the gentlewoman from Connecticut [Mrs. LUCE] said yesterday, that there are unknown factors in everything. Important legislation will necessarily be subject to revision from time to time. I have yet to see any legislation in this House, even the Constitution of the United States, that would not be subject to revision from time to time. Then the declaration of policy says it is reasonable to anticipate, however, that adopting this new source of energy will cause definite changes in our present way of life.

Our life is full of changes and, of course, that is to be understood. But why put it in here and clutter up the bill? Now, what we should do, of course, is to assure the people of the world and the people of this country that we are going to use atomic energy for the public welfare, not only of ourselves, but of all peoples, and also to increase the standards of living of ourselves and of all peoples. We should put that first. Then we should say we want it for the promotion of world peace and we want it for security and protection. But we should say that we want it not only for ourselves but for all peace-loving nations. That does not mean that we will let foreign nations have the secrets at this

time, but it certainly says what our aims are and states them specifically, shortly, and directly.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. FULTON. I yield to the distinguished gentleman from Michigan.

Mr. DONDERO. The gentleman mentions world peace. Do you think we should share the secrets of this bomb if the peace conference which will convene in Paris on the 29th of this month fails because of the veto power of one or more of our allies, as it has failed up to the present time?

Mr. FULTON. I agree with the intent of the question and with the presumption made by the gentleman from Michigan that we should not share it. But because we have this stewardship and trusteeship, we should let the people of the world know that in the protections that we are throwing around the development of atomic energy and the secrets of atomic energy we will see that it is done for the good of the world. I hope we will do just contrary to what some other countries might want to do, who would keep it selfishly for themselves and then use it, not for the good of the people in raising the standards of living for the people, but for aims that they might call protection but which really were for purposes of aggression.

Mr. DONDERO. I think the whole world knows now that the secret of this bomb is in the hands of a government that does not think it is necessary for the whole world to adopt our form of government in order to insure world peace.

Mr. FULTON. I think the gentleman's remarks are very much to the point and agree with them. May I then ask the chairman of the Committee on Military Affairs two questions?

On page 3 is found this language which my Harvard training will not permit me to read and make any sense out of. The language is as follows:

A program of federally conducted research and development to assure the Government (with a capital "g") of adequate scientific and technical accomplishment.

Is the word "Government" there used in the sense of the Federal Government, or is the word "Government" used to mean the control of accomplishment?

The CHAIRMAN. The time of the gentleman from Pennsylvania has expired.

Mr. FULTON. Mr. Chairman, I ask unanimous consent to proceed for three additional minutes.

The CHAIRMAN. Without objection, it is so ordered.

There was no objection.

Mr. MAY. I might answer the gentleman's question, although I am not a Harvard man, by saying that I would understand from the language in line 13 on page 2 that it is the purpose of the act to effectuate the policies set out in section 1 (a), which is the preceding section, which provides, among other things, for the following major programs relating to atomic energy. Then when you go to subsection (3) it would be a program of federally conducted research. That means the Government would carry on the program of scientific research and

development to assure the Government of adequate scientific and technical accomplishment.

Mr. FULTON. Do you mean to assure the Government adequate scientific and technical accomplishment, or do you mean to assure the Government—meaning "control"—of adequate scientific and technical accomplishment? If you mean the Federal Government, you have to strike out the word "of."

Mr. MAY. All it does is to assure a program of federally conducted research and development. That is all.

Mr. FULTON. Then may I recommend that the conferees, when they meet, change that section (3) to read: "to assure the Federal Government" and strike out the word "of." The word "of" does not fit there according to the meaning that you have given.

Subsection (5) on page 3 refers to a program of administration which will be consistent with the foregoing policies "and international arrangement made by the United States." I ask the chairman of the Military Affairs Committee whether any arrangements already have been made internationally, by the United States. Have there been any international arrangements already made by the United States in respect to atomic energy? In this act the committee seems to assume that there have been.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. FULTON. Yes.

Mr. MAY. This bill by a subsequent provision provides adequate facilities and plans, under licensed systems of authority, to research laboratories, industries, colleges, and universities. This is merely a statement of federally conducted experiments through this Commission. The Commission will determine who is licensed and under what conditions.

The CHAIRMAN. The time of the gentleman from Pennsylvania [Mr. FULTON] has again expired.

Mr. FULTON. Mr. Chairman, I ask unanimous consent to proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Pennsylvania?

There was no objection.

Mr. FULTON. But you say, "international arrangements made," not to be made, which infers they already have been made by the United States. That is international agreements with respect to atomic energy. Why do you use the statement, "made"? If they are to be made, let us say it, but if they are already made, then I ask you, What are those international arrangements already made in respect to atomic energy, by the United States? Are there any? Let me hear directly.

Mr. MAY. Let me call the gentleman's attention to section 8:

As used in this act, the term "international arrangement" shall mean any treaty approved by the Senate or international agreements hereafter approved by the Congress during the time such treaty or agreement is in full force and effect.

That is the answer.

Mr. FULTON. May I state to the chairman of the Military Affairs Commit-

tee, as a practicing attorney, that is what the definition would be if the act were passed. The act is not now in effect. So I again ask the chairman of the Military Affairs Committee, Are there any international agreements in respect to atomic matters that are now in existence? I would appreciate a yes or no answer.

Mr. MAY. Well, you are not going to get a yes or no answer out of me, because I am not on the witness stand to be cross-examined. In the second place, this bill provides what the Commission may or may not do. It does not make it mandatory.

Mr. FULTON. May I then request, Whom shall I ask to find out as to the possible existence of these international atomic agreements?

Mr. MAY. I suggest to the gentleman that he study the bill.

The CHAIRMAN. The time of the gentleman from Pennsylvania has again expired.

Mr. FULTON. Mr. Chairman, I ask unanimous consent to proceed for 3 additional minutes to answer the questions of several Members now on their feet.

The CHAIRMAN. Is there objection to the request of the gentleman from Pennsylvania?

Mr. DURHAM. Mr. Chairman, I object.

Mr. SHAFER. Mr. Chairman, I rise in opposition to the amendment.

The CHAIRMAN. The gentleman from Michigan is recognized for 5 minutes.

(Mr. SHAFER asked and was given permission to revise and extend his remarks.)

Mr. SHAFER. Mr. Chairman, the gentleman from Pennsylvania [Mr. FULTON] asked the chairman of the Military Affairs Committee if there had been any international agreements entered into in connection with the atomic energy. Apparently there have been. If my understanding is correct, we have agreements with Great Britain and Canada. Is that not true?

Mr. MAY. That is my understanding, but I do not know what they are.

Mr. SHAFER. Everyone seems to be greatly interested in what we are going to do with the atomic bomb. I hold in my hand a message from Mr. Ernest Adamson, chief counsel of the Un-American Activities Committee, and I think it should be read at this point in the debate. The message, written today, reads:

I have just learned through the State Department channels that an International Scientists Conference will be held in Paris during the month of September to discuss control of the atom bomb. The head of the conference is one Joliot-Curie, an active member of the French Communist Party. A large group of delegates from the United States is expected to attend.

Mr. AUGUST H. ANDRESEN. Mr. Chairman, will the gentleman yield?

Mr. SHAFER. I yield.

Mr. AUGUST H. ANDRESEN. Does the gentleman have any suspicions that there might be some secret agreement which was made over in Potsdam or some other place?

Mr. SHAFER. I do not know whether there are secret agreements. I have my own opinions, but I do not care to state them here.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. SHAFER. I yield.

Mr. JOHNSON of California. Is this a conference of private individuals or an official government conference?

Mr. SHAFER. It is called an International Conference of Scientists. I do not know whether it is a government conference; it is an international conference.

Mr. BROOKS. Mr. Chairman, will the gentleman yield?

Mr. SHAFER. I yield.

Mr. BROOKS. The gentleman knows that while this matter was under consideration by the House Military Affairs Committee we made special inquiries of the State Department as to whether or not there were any secret agreements affecting the atomic bomb that had not been published in any respect and we received definite and positive word without qualification to the effect that there was nothing affecting this legislation that had not been completely published and publicized. Is that correct?

Mr. SHAFER. That is what we were told.

Mr. BARDEN. Mr. Chairman, will the gentleman yield?

Mr. SHAFER. I yield.

Mr. BARDEN. That leaves me somewhat at a loss to understand why the chairman of the committee would say he does not know what they are.

Mr. SHAFER. That is the reason why I called attention to the fact that we do have agreements with Great Britain and Canada.

Mr. BROOKS. The chairman had those in mind when he referred to agreements.

Mr. BARDEN. Possibly the gentleman from Louisiana would know the contents of those agreements.

Mr. SHAFER. I will yield for him to tell us.

Mr. BROOKS. I have just told the gentleman that the State Department stated that there was no secret agreement on the subject. As to whether or not another agreement covers the subject, the gentleman is aware of what has been published in the daily press just as well as I, and I presume he has read them as carefully as I did.

Mr. BARDEN. Mr. Chairman, will the gentleman yield further?

Mr. SHAFER. I yield.

Mr. BARDEN. Would the gentleman mind giving us the benefit of the contents of the agreements that are in existence with Great Britain and Canada?

Mr. BROOKS. No. I can tell the gentleman that if he had read what has been published, he would know just as well as I do. I understood there was some sort of understanding between Canada and us because we did obtain the original materials from Canada, but there is nothing secret at all. It was called to our attention at the time.

Mr. RICH. Mr. Chairman, will the gentleman yield?

Mr. SHAFER. I yield.

Mr. RICH. Does not the gentleman believe that the House should know something about these agreements and promises that are being made with these foreign countries before we turn loose what is probably the most destructive force that the world has ever known?

Mr. SHAFER. If there are any agreements or promises, I think it is highly important to find out all about them.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Pennsylvania [Mr. FULTON].

The question was taken; and on a division (demanded by Mr. FULTON) there were—ayes 5, noes 42.

So the amendment was rejected.

Mr. MAY. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. MAY. Are there further amendments pending at the desk with reference to section 1?

The CHAIRMAN. There are not.

Mr. MAY. Then I ask unanimous consent that all debate on this section and all amendments thereto do now close.

Mr. THOMAS of New Jersey. I object.

The Clerk read as follows:

ORGANIZATION

SEC. 2. (a) Atomic Energy Commission:

(1) There is hereby established an Atomic Energy Commission (herein called the Commission), which shall be composed of five members. Three members shall constitute a quorum of the Commission. The President shall designate one member as chairman of the Commission.

(2) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate. In submitting any nomination to the Senate, the President shall set forth the experience and the qualifications of the nominee. The term of office of each member of the Commission taking office prior to the expiration of 2 years after the date of enactment of this act shall expire upon the expiration of such 2 years. The term of office of each member of the Commission taking office after the expiration of 2 years from the date of enactment of this act shall be 5 years, except that (A) the terms of office of the members first taking office after the expiration of 2 years from the date of enactment of this act shall expire, as designated by the President at the time of appointment, one at the end of 3 years, one at the end of 4 years, one at the end of 5 years, one at the end of 6 years, and one at the end of 7 years, after the date of enactment of this act; and (B) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term. Any member of the Commission may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. Each member, except the chairman, shall receive compensation at the rate of \$15,000 per annum; and the chairman shall receive compensation at the rate of \$17,500 per annum. No member of the Commission shall engage in any other business, vocation, or employment than that of serving as a member of the Commission.

(3) The principal office of the Commission shall be in the District of Columbia, but the Commission or any duly authorized representative may exercise any or all of its powers in any place. The Commission shall hold such meetings, conduct such hearings, and receive such reports as may be necessary to enable it to carry out the provisions of this act.

(4) There are hereby established within the Commission—

(A) a General Manager, who shall discharge such of the administrative and executive functions of the Commission as the Commission may direct. The General Manager shall be appointed by the President by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$15,000 per annum. The Commission may make recommendations to the President with respect to the appointment or removal of the General Manager.

(B) a Division of Research, a Division of Production, a Division of Engineering, and a Division of Military Application. Each division shall be under the direction of a director who shall be appointed by the Commission, and shall receive compensation at the rate of \$14,000 per annum. The Commission shall require each such division to exercise such of the Commission's powers under this act as the Commission may determine, except that the authority granted under section 3 (a) of this act shall not be exercised by the Division of Research.

(b) General advisory committee: There shall be a general advisory committee to advise the Commission on scientific and technical matters relating to materials, production, and research and development, to be composed of nine members, who shall be appointed from civilian life by the President. Each member shall hold office for a term of 6 years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term; and (2) the terms of office of the members first taking office after the date of the enactment of this act shall expire, as designated by the President at the time of appointment, three at the end of 2 years, three at the end of 4 years, and three at the end of 6 years, after the date of the enactment of this act. The committee shall designate one of its own members as chairman. The committee shall meet at least four times in every calendar year. The members of the committee shall receive a per diem compensation of \$50 for each day spent in meetings or conferences, and all members shall receive their necessary traveling or other expenses while engaged in the work of the committee.

(c) Military Liaison Committee: There shall be a Military Liaison Committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine. The Commission shall advise and consult with the Committee on all atomic energy matters which the Committee deems to relate to military applications, including the development, manufacture, use, and storage of bombs, the allocation of fissionable material for military research, and the control of information relating to the manufacture or utilization of atomic weapons. The Commission shall keep the Committee fully informed of all such matters before it and the Committee shall keep the Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the Committee at any time concludes that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the Departments of War or Navy, derived from the Constitution, laws, and treaties, the Committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy. If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

With the following committee amendment:

Page 3, line 19, after the word "members", insert "at least one of whom shall be a representative of the armed forces."

Mr. THOMASON. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, there are two gentlemen who always add a lot to the best thinking of this body. One of them is the gentleman from Minnesota, Dr. JUDD, and the other is the gentleman from Massachusetts, Mr. HERTER. I share the views of the distinguished gentleman from Minnesota when he says that it is not exactly a life-or-death matter whether this amendment is adopted or not. But I go back to the statement I made earlier in the debate, that I think there is a fundamental principle involved. As he said, they are all going to be good Americans, and whether they are in the Military Establishment or in civilian life does not matter. However, if a military man goes on there he has divided interests. His first big interest is the military. You will recall that under the bill the President must give the qualifications of his nominees when he sends them to the Senate. I have an idea that the Senate will comb those nominees with a fine-tooth comb, as that body ought to do. They will have to be able and patriotic.

Mr. Chairman, I am as sincere as I know how to be about the following statement: In view of the Vandenberg amendment which sets up this liaison committee that has completely satisfied the Secretary of War, the Secretary of the Navy, General Eisenhower, and everybody in authority in our Military Establishment, there is no use going out and getting military men to set up our policy-making in this country. You might just as well put a high general in as Secretary of War or a high admiral in as Secretary of the Navy. We just have not got that kind of a government, and it is not necessary. Besides, you would have the military liaison setting around the table making their requests, and even their demands, which they would take back to their superiors, and if they were not accepted they could take them to the Commander in Chief, the President of the United States. What is there to fear from the military angle of the situation? The war is over. We are trying to work out world peace. We do not want to add to the suspicion that some of our allies have, that we are getting ready for another war. I am not willing to give our atomic-bomb secret to anybody or any nation, and we are not doing so under this bill. I want the President and Secretary of State to handle our foreign affairs and determine our foreign policy. I do not want the Army and Navy to do that. Theirs is a different function.

Secretary Byrnes and Senators CONNALLY and VANDENBERG have been sitting around the conference table. They are back here now, but I assume they will return on the 29th. It seems to me a very appropriate time to allow this atomic-energy problem, insofar as its military application is concerned, to remain in the hands of the Army or in the

hands of the liaison committee and let us devote our time and energy putting this great discovery to peaceful purposes for the benefit of mankind.

This is no time for an atomic bomb armament race. I am frank with you in saying that there are some nations in the world, particularly one, that look on us with suspicion, and that may add to suspicion on our part. I want us to stand our ground, defend our principles and assert our rights, but I want to be sure we do nothing to provoke another war.

The CHAIRMAN. The time of the gentleman from Texas has expired.

Mr. THOMASON. Mr. Chairman, I ask unanimous consent to proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Texas.

There was no objection.

Mr. THOMASON. As the gentleman from Massachusetts [Mr. HERTER] so well said, we are trying to get back on the track to world peace, and if this will not do the job, will somebody please suggest some means by which we can get some kind of a commission together or somebody to place this atomic energy in the hands of that would use this for the promulgation of peace and understanding between the nations of the world?

Mr. ARENDS. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Illinois.

Mr. ARENDS. I agree with the gentleman from Texas that possibly the question of life and death whether this committee is constituted of civilians entirely, or of civilians and one military man, is not so important. But, will the gentleman tell me one good reason that might be advanced why there should not be one military man on this committee, or what damage would result?

Mr. THOMASON. I do not know if there would be any special damage done, but you cannot find any policy-making commission in the Government, that has generals and admirals members of it. The Army and Navy think in terms of war and national defense. They think in terms of the military, as they ought to. Perhaps they were educated at West Point, and if so, that is their business and their profession. That is commendable; I do not find fault with that, but this idea has to do with turning atomic energy into peaceful pursuits and not for use by the military. The military will take care of our military needs just as they did in the last war. They have no business on our civilian policy-making commissions.

The CHAIRMAN. The time of the gentleman from Texas has again expired.

Mr. THOMASON. Mr. Chairman, I ask unanimous consent to proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mr. DURHAM. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from North Carolina.

Mr. DURHAM. Is not the main question as to the composition of this commission what they are going to be worth to the country, what they can contribute? There are very few military men who are scientists.

Mr. THOMASON. You hear a lot of criticism of scientists. Some people say they are crackpots, long-haired guys, and Communists. Nevertheless, they are the ones who discovered and developed this bomb. It is true that a good friend of mine whom I admire extravagantly, General Groves, was in charge there as the boss of the show, the physical end of it. But Dr. Oppenheimer, the president of Boston Tech, the president of Harvard, Dr. Vannevar Bush, and other great scientists are the men who developed this bomb. They are good Americans just as we are and just as the Army is. They are to be trusted and ought to be encouraged.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Connecticut.

Mrs. LUCE. I agree with the gentleman's viewpoint, that no particular good will come of putting a military man on this commission, but does the gentleman realize that in all the very lengthy debate and hearings on this subject in the Senate practically all the scientists themselves testified that there should not be more than one scientist on the commission?

Mr. THOMASON. Yes, I believe that is true, but I know a lot of fine businessmen in this country. I think Barney Baruch is one of our greatest Americans. I know many more great businessmen and industrialists. Their great passion is to do something for their country. Many of them would be eminently qualified for membership on this commission. I beg of you to vote down this amendment and let the military attend to their affairs.

Mr. JOHNSON of California. Mr. Chairman, I offer an amendment to the committee amendment.

The Clerk read as follows:

Amendment offered by Mr. JOHNSON of California to the committee amendment: That the word "shall" in line 19 on page 3 of the bill be stricken out and in lieu thereof the word "may" be inserted.

Mr. JOHNSON of California. Mr. Chairman, I can see that perhaps a man who has had some military experience, and I include naval experience, might be a very valuable member of this Commission. As I see it, the Commission is not to be a group of men who are scientists; in fact, the scientists wanted to keep the number at one or possibly two. There are men with judgment, with vision, men who can take a set of facts and look at a situation and make the right determinations when the facts and information are given to them. We know there will be developed a scientific research department in the Army and the Navy following this war. It is being set up now. It may very well be that an officer who has handled such a department, who has conducted that sort of an operation for the Army or the Navy, would be a most valuable man to have on this Commission.

The way my amendments reads, it leaves it optional with the President to

pick out a man of that caliber and that training if he feels that would advance the program of the Commission. I do not want to tie the President's hand, but it does give him that extra field to look to for men for this Commission. As I say, there are many men on the retired list and some on the active list of the Army and Navy who by their experience, their training, and their outlook would make a very excellent addition to such a Commission. That is the reason I offer this amendment. To me it looks like just plain common sense. It leaves the matter entirely in the hands of the President. I hope you will take my views and adopt this amendment. It does not put the stamp of approval of the military on the Commission, nor does it make it obligatory on the President to appoint military men.

Mr. FOLGER. Mr. Chairman, will the gentleman yield?

Mr. JOHNSON of California. I yield to the gentleman from North Carolina.

Mr. FOLGER. The committee amendment reads, "at least one of whom shall be a representative of the armed forces." Does not that mean that all of them could be, if the President wanted it that way?

Mr. JOHNSON of California. Later on there is an amendment that limits it to two. In fact, I should like to limit the number to just one, and then make it permissive.

Mr. FOLGER. Why not strike out the words "at least" and say "one of whom shall be"?

Mr. JOHNSON of California. "One of whom may be."

Mr. FOLGER. Yes; "one of whom may be."

Mr. JOHNSON of California. Mr. Chairman, I ask unanimous consent to modify my amendment by adding that the words "at least" shall be stricken from the committee amendment.

The CHAIRMAN. Is there objection to the request of the gentleman from California?

There was no objection.

The CHAIRMAN. The Clerk will report the amendment as modified.

The Clerk read as follows:

Amendment offered by Mr. JOHNSON of California: That the word "shall", in line 19, page 3 of the bill, be stricken out and in lieu thereof the word "may" be inserted and strike out the words "at least", in line 19.

Mr. MAY. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, I do not intend to be either rude or discourteous to my genial colleague who has always been cooperative and nice to me, but I must admit that the amendment to the committee amendment as proposed by the gentleman from California seems entirely futile. It strikes out the words "at least" and changes the word "shall" to "may", so that the committee amendment would read "one of whom may be a representative of the armed forces." The purpose of the word "shall" as written in by the committee after study and consideration was that some representative of the armed forces should be a member of this Commission.

Mr. ELSTON. As a matter of fact, the amendment offered by the gentleman

from California would completely destroy the committee amendment.

Mr. MAY. That is exactly what it would do because the intent and purpose of the committee was to be certain that there was one representative of the armed forces on this Commission. The argument of my colleague the gentleman from Texas [Mr. THOMASON] was to the effect that in reality there was not any trouble with this amendment if there was any idea in the minds of the membership of this body that there ought to be any representation of the armed forces on this Commission. If there is to be a balancing of responsibility, as stated by the gentleman from Minnesota [Mr. Judd], then the only way it can be balanced is to have a balanced representation. If this amendment to the committee amendment is adopted, we might just as well eliminate the entire amendment because that is exactly what it does. I am definitely opposed to the crippling of any legislation on this vital subject that affects mankind the world over and affects the security and safety of this country.

Now, what is wrong—I go back for an answer—what is wrong with letting somebody who is a military man, who knows the military workings of our armed forces, be a member of this Commission, with four civilians with him? If he wanted to do something wrong, could he do it? If he wanted to militarize the Commission, could he do it? If he wanted to set up a militaristic government under that Commission, could he do it? No. He could not do either one. I am persuaded that there must be something behind the opposition to this proposal or there would not be such persistent objection to that one thing.

The CHAIRMAN. The time of the gentleman from Kentucky [Mr. MAY] has expired.

Mrs. LUCE. Mr. Chairman, I rise in opposition to the committee amendment.

Mr. Chairman, I have already expressed my opposition to the committee amendment, which requires that one member of the Commission shall be a member of the armed forces.

My opposition is not by any means heated, because I think the whole issue is unimportant compared to the many other issues which this legislation brings up, in later sections of this bill. I agree with my colleagues who say that one military man on the Commission will not make a dictatorship out of this Commission. It is a dictatorship anyway. Moreover, I am completely satisfied, having studied the legislation and read much of the McMahon committee hearings, that the military and their interests are adequately represented through the military liaison committee provided for in the Senate bill. But I am concerned, and deeply concerned, about the composition of this five-man commission. Yesterday I referred to the Senate hearings on this bill, part II, pages 172 to 174. There testimony was given on the subject of the proper composition of the Commission by a most distinguished and most important scientists, Dr. Howard Shapley. Dr. Shapley, as you know, is director of the Harvard Observatory and a member of the Harvard University fac-

ulty. When he was asked by the chairman of the committee what type of men he thought should be on this Commission he replied, "heroes." He went on to say that he meant by "heroes" "men who do see that this is an unusual situation and who are willing to sacrifice their past and their future to take positions and responsibilities on the Commission." He then went on to say that he personally could think of a dozen men in the United States who would be competent to be on this Commission, but he added that all of them, men with either industrial or scientific training, were in highly successful or remunerative positions now, and it would be a great sacrifice for them to give these up for a job on the Commission. The men who go on this Commission are going to be on it for 6 years. Four of them are going to get salaries of \$15,000 and the Chairman \$17,500 per year. Now, it seems to me that a man qualified to take the chairmanship or of serving on this Commission should be one of three things: A great scientist, a top-notch American industrialist, or a top-notch administrator. Now, any top-notch industrialist I can think of would surely be earning more than \$15,000 a year. He might even be earning \$100,000 or \$200,000 a year.

Now, it has been suggested by the gentleman from Texas that we ought to have men on this Commission of the caliber of Bernard Baruch. I agree, but how many Bernard Baruchs are there in the United States? The mold made for that great public servant is not already broken, but if there are any more Baruchs you may be well assured that they have highly satisfactory, useful, remunerative jobs now. I am concerned about this question: Where shall we find men of the caliber to run what may be a \$20,000,000 atomic corporation exerting vast dictatorial powers? How shall we find men to fill such gigantic shoes? Is not the danger that we shall be forced to put bureaucratic peewees into jobs that should be held only by supermen?

The CHAIRMAN. The time of the gentlewoman from Connecticut has expired.

Mrs. LUCE. Mr. Chairman, I ask unanimous consent to proceed for three additional minutes.

The CHAIRMAN. Is there objection to the request of the gentlewoman from Connecticut?

There was no objection.

Mrs. LUCE. I assure you the danger about such a commission is not whether or not we put one military man on it, since he at least would probably be a qualified specialist. The danger is what kind of civilians competent to serve on this Commission can we get for \$15,000 a year. I ask myself that every day.

Mr. O'HARA. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. O'HARA. Does not that illustrate one of the dangers perhaps of creating this Commission at this time?

Mrs. LUCE. Oh, I have been saying right along this is a very dangerous bill, insofar as it affects the political structure of our Government. But I think it is necessary for many of the reasons given by the gentleman from Massachusetts

[Mr. HERTER], and I agree with my colleague the gentleman from Texas [Mr. THOMASON] that we must have some civilian control of atomic energy if we are both to control and guide further scientific developments for war or peace in the nuclear field.

Mr. AUGUST H. ANDRESEN. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. AUGUST H. ANDRESEN. I can think of a lot of men who are now in high places who should not be on the Commission.

Mrs. LUCE. I agree with the gentleman. The danger is that only \$15,000 a year may be no inducement to great and able citizens, but it will be a great inducement to bureaucrats who are not fit to run a shoe factory, let alone a \$20,000,000 life-and-death corporation.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. THOMAS of New Jersey. Who is going to appoint this Commission?

Mrs. LUCE. The President will appoint the Commission. Now, I do not doubt for a second that he will seek the best men for the job, but will the best men—men of brains and ability give up 6 years of their life—all their past and future, as Doctor Shapley called it, to work at this salary?

Mr. JUDD. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentleman from Minnesota.

Mr. JUDD. Is it not true that someone is going to control atomic energy? Is there not a better chance of getting high-grade men under this sort of bill than to let it go without any guidance or control?

Mrs. LUCE. There is no limit to the heights of patriotism men can be carried to in wartime, but I wonder, if in peacetime men who could make \$100,000 a year would give that up and 6 years of their life for \$15,000, particularly when you consider the dead cats and tin cans that always get thrown at even the most disinterested public servant.

Mr. GAVIN. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentleman from Pennsylvania.

Mr. GAVIN. Would it not be better then to let this matter rest and keep it in the hands of the War Department until such time as we can find men of the character and ability to do the kind of job the gentlewoman wants done?

Mrs. LUCE. No; no; I say to the gentleman from Pennsylvania, we must not let this matter rest, we must think it through.

Mr. GAVIN. I disagree with the gentlewoman.

Mrs. LUCE. We have got to get on with controlling atomic energy.

Mr. GAVIN. Then leave it with the Army; they will take care of it.

Mrs. LUCE. The thing for us to do here is to use our brains, and perfect this legislation here, or in committee, but to get on with it.

Mr. GAVIN. We will be using our brains if we leave it with the War Department.

Mr. ARENDS. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentleman from Illinois.

Mr. ARENDS. My understanding is that officers such as Gen. George C. Marshall when they are retired would be available. Knowing the splendid work that General Marshall has done as Chief of Staff and since the end of the war in other capacities, would not he be the type of man to sit on this Commission and one in whom we would all have faith and confidence?

Mrs. LUCE. I have much faith in General Marshall's military services. I certainly think no one in the Nation would object to General Marshall on the Commission.

The CHAIRMAN. The time of the gentlewoman from Connecticut has again expired.

Mr. ALLEN of Illinois. Mr. Chairman, I ask unanimous consent that the gentlewoman from Connecticut may proceed for three additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Illinois?

There was no objection.

Mr. BROOKS. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. BROOKS. In reference to what my colleague from Illinois has just referred to regarding officers of the caliber of Gen. George C. Marshall being appointed, even without the committee amendment referred to, there would be no objection under the bill as presently drawn to his appointment to the Commission if the President decided to make the nomination, would there?

Mrs. LUCE. I think there would be no objection. But may I continue to answer the question of postponement which has been repeatedly brought up on the floor. All during the Senate hearings, which have become required reading on this legislation, Senator MILLIKEN had one standard question he asked of every single witness. You will find it, I believe, in every piece of testimony. His question of every witness was, Would there be any irreparable damage done to the United States if this matter were "bottled up" for a year? To that question Dr. Harlow Shapely, for example, said, "No; there would be no harm to the United States if there was no legislation for a year."

I offer that, not as final, but as a clue for those who have the time and inclination to wade through those very thick Senate hearings to see how other witnesses testified. I say no, we dare not postpone the passage of legislation unless we wish to take risks with American lives. That is why I am for the passage of a good bill and not for any bill being pigeonholed.

Mr. JOHNSON of California. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentleman from California.

Mr. JOHNSON of California. Why would not the sensible thing be then to pass my amendment and let the President place a military man on there if he wants to, but not compel him to do so?

Maybe he wants Arnold or Marshall to be a member.

Mrs. LUCE. I think the gentleman's amendment is a very good compromise, but not a necessary one, because it does not matter greatly whether or not there is a military man on the Commission. You may be quite sure that, if the President wants to put General Marshall on, he may do so, even under the Senate bill.

Miss SUMNER of Illinois. Mr. Chairman, will the gentlewoman yield to me?

Mrs. LUCE. I yield to the gentlewoman from Illinois.

Miss SUMNER of Illinois. I wish the gentlewoman from Connecticut would elaborate on her statement, that has been made here two or three times, that you risk lives if you wait. I do not get the connection. I do not know how that conclusion is arrived at.

Mrs. LUCE. It seems to me that the problem of atomic energy is largely the bomb problem. How many bombs can we stock pile so that if we are attacked we can launch a conclusive reprisal? And how can we make, if we must make, more powerful atomic weapons?

The CHAIRMAN. The time of the gentlewoman from Connecticut has expired.

Mr. ALLEN of Illinois. Mr. Chairman, I ask unanimous consent that the gentlewoman from Connecticut may proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Illinois?

There was no objection.

Mrs. LUCE. Mr. Chairman, the facilities used in the atomic process are the same, I am told, whether their product is bombs, or energy, or material for cancer cures. Peacetime nuclear energy facilities and plants constructed for generating heat or electrical energy or for scientific research in cancer or leukemia can, I am told, overnight be turned over into the making of bombs and vice versa. Every single scientist in the Senate hearings, and in the old May-Johnson hearings, testified that the bombs of today, the ones that we have now on the stock pile, are going to look like firecrackers compared with the ones science of other lands may be able to make. We must keep abreast and ahead of all developments.

They say that there are two ways to make a horse run. You may give him a lick with a whip, or you can offer him a carrot. The whip is military procedure; the free-enterprise system up until now has favored carrot. This bill conserves a few carrots for the scientists. It is important to remember that a hundred or two hundred scientists are the key figures, the absolute key figures in our atomic development, and these men just will not work for brass hats. In times of peace, they will only work in civilian enterprise, and short of conscripting them forcibly, you will not be able to make them work for the Army in peacetime; therefore, you must have civilian control in order to guide induce and control scientists while they work and under conditions that are pleasing to them as civilians.

The CHAIRMAN. The time of the gentlewoman from Connecticut has expired.

(Mrs. LUCE asked and was given permission to revise and extend her remarks in the RECORD.)

Mr. ELSTON. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I rise in support of the committee amendment and in opposition to the amendment offered by the gentleman from California. We have been trying for a long time to have somebody give us one good reason why a military man should not serve on this commission, and up to the present time we have not received that reason.

There is a very good reason stated in this bill why a member of the armed services should be on the commission. I refer to that part of the declaration of policy itself, which says:

Subject at all times to the paramount objective of assuring the common defense and security.

In other words the paramount objective of this bill is to assure the common defense and security. Either the language I just quoted is idle words, put in the bill for the purpose of misleading somebody or they mean exactly what they say. If the language in question is given the only interpretation it is susceptible of, then this becomes a national defense measure along with its other features. If that is true, why should we not have a representative of the armed forces on the Commission? This would not create military control but would simply permit the armed forces to be represented. The cases referred to by the gentleman from Texas, [Mr. THOMASON], and others, where military men do not serve on commissions because of tradition, refer solely to commissions not dealing with matters of national defense. The contention is made that everything is taken care of by the section that sets up a liaison committee. However, if you will examine that section you will find that the liaison committee is given absolutely no authority.

Furthermore, there is nothing that that liaison committee is authorized to do that it cannot do at the present time. For example, this section requires the Commission to consult with the liaison committee. Suppose we did not have this committee and the War Department wanted to consult with another department of Government and there was a refusal to meet. It would take only an order from the President to bring about the desired meeting. Then it is claimed the liaison-committee section authorizes an appeal by members of the armed services to the Secretary of War or the Secretary of the Navy. In response to this contention I should like to ask what Army or Navy officer cannot now appeal to the Secretary of War or the Secretary of the Navy? If the Secretaries, in turn, want to appeal to the President, it is their privilege to do so. Certainly no legislation is necessary to accomplish it.

So the military-liaison-committee sections adds absolutely nothing to this bill. I contend it was inserted in the bill merely for the purpose of making it appear that the armed forces have been given recognition, when actually they are granted no more authority than already exists. If the committee amendment is

not adopted, men like General Groves, for example, could not serve on the Commission, although he was the one who supervised the Manhattan project and the building of our atomic bombs. I don't believe in turning everything over to the professors and the bureaucrats.

I submit that there is no reason why the armed services should not be represented on the Commission. In fact since matters of national defense are involved there is every reason why they should be so represented.

The CHAIRMAN. The time of the gentleman from Ohio has expired.

Mr. ARENDS. Mr. Chairman, I ask unanimous consent that the gentleman be permitted to proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Illinois?

There was no objection.

Mr. ELSTON. The War Department is not concerned entirely with military matters. The Panama Canal, for example, was built by the Army. All of our rivers and harbors projects and all of our flood-control projects have been constructed under the supervision of the Army Corps of Engineers. They are in no sense of the word war projects.

Mr. Chairman, another reason why I submit we should have military men on this Commission is because of security. If this becomes entirely a civilian Commission, all the employees will become civilian employees. The Civil Service Commission recently announced that they did not have the personnel to examine into the subversive activities of their employees, whereas the War Department does have such facilities. The employees at Oak Ridge are today under the supervision and direction of the War Department; but even with that supervision, they are having a difficult time keeping down subversive activities. So from the simple standpoint of security it is infinitely better that at least one member of the armed services be represented on this Commission. Therefore, I submit that the amendment offered by the gentleman from California, which would completely destroy the committee amendment, should be voted down, and the committee amendment should be adopted.

(Mr. ELSTON asked and was given permission to revise and extend his remarks.)

Mr. MARTIN of Iowa. Mr. Chairman, I rise in support of the committee amendment and in opposition to the amendment offered by the gentleman from California removing the compulsory portion of that amendment.

The gentleman from Ohio [Mr. ELSTON] has well stated the background of his amendment, which is now the committee amendment, in that we need some military participation on the Commission. I say very seriously that I am not willing to take the determination of Secretary of War Patterson or anyone else who says the Army should pass this responsibility up. As a citizen I am primarily interested in putting on the doorstep of the War Department the responsibility of determining the use of the atomic bomb, of helping determine that

policy, and of helping guard our Nation through building a defense against the atomic bomb. It is the responsibility of the Navy and the Army to defend our Nation and to look into this highly scientific and highly technical new super-weapon with a view to protecting us as a national defense measure against any use of it against us by any possible future enemy. They cannot get out from under their responsibility by a mere statement of Mr. Patterson before the Committee on Military Affairs that they are satisfied with this bill, which does not give them that responsibility.

I call the attention of the gentleman from North Carolina [Mr. DURHAM], who spoke about the need for scientists on this Commission, to the fact that the Senate report on page 21 states:

While the Commissioners need not be scientists or technical experts, they must combine clear judgment with imagination and courage, and they must, like the members of the judiciary, be so divorced from private and competing concerns as to give complete, disinterested, and undivided attention to their tasks.

I ask where could you find a better definition of an Army or Navy man than right there in that very paragraph by the Senate Committee. I look to the War Department and the Navy Department as being charged with the protection of this country. If you bar the 1,500,000 members of the armed forces from active participation on this Commission you may forget the importance of some of these development to our national defense until it is too late. If you overlook the defense of the Nation in the development of atomic energy by not having any military men or naval men on the Commission, then when we are attacked, it will be entirely too late. I want to pin the responsibility squarely on the armed forces of this Nation to protect us before it is too late. In my opinion, it is highly important that a member of the armed forces be on this Commission. I have an amendment which will come up later, a committee amendment, that limits the number to not more than two in order to avoid military control of the Commission because I would be opposed to military control of the Commission. But that is a far different matter. In my opinion, we are letting down on our obligations to the Nation and its defense if we make ineligible for appointment to this Commission the 1,500,000 men who make the national defense of our Nation their life study and their life's work. At no time is it more important to get them into the picture than now in dealing with this super weapon that may be hurled against us by any future enemy of our country.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. MARTIN of Iowa. I yield.

Mr. JOHNSON of California. Under my amendment it is possible and probable that the President, the Commander in Chief, will and he can appoint an Army or Navy man. Is that not a fact?

Mr. MARTIN of Iowa. My answer to that is that the people speaking through their Congress should here and now make certain there is a member of the armed forces serving on this Commission

because of the far reaching responsibility in the field of national defense.

The CHAIRMAN. The time of the gentleman from Iowa has expired.

Mr. McCORMACK. Mr. Chairman, I rise in opposition to the pro forma amendment.

Mr. Chairman, I have heard some observations made here about the fact that General MacArthur and other men, even after retirement, as I understood, and if I did not understand it correctly I would like to be corrected, could not serve if appointed to this Commission. I would like to be enlightened on that because the information I have as to existing law is that after retirement they could serve on the Commission, although if their salary exceeds their retirement pay they would have to make an election as to what compensation they would accept.

Mr. MARTIN of Iowa. Mr. Chairman, will the gentleman yield?

Mr. McCORMACK. I yield.

Mr. MARTIN of Iowa. You will find on page 8 of the bill, subsection (d), the section enabling retired and active duty officers to serve on such an assignment.

Mr. McCORMACK. Yes; I have noticed that. That is particularly intended to relate to officers on active duty.

The law I have before me is to the effect that after June 30, 1932, no person holding a civilian office or position, appointive or elective, under the United States Government, and so forth, can accept it where he gets over \$3,000 retirement or pension unless he waives it. So that, as I understand the law, General Marshall could be appointed without the necessity of this amendment being adopted except that he would have to waive his retirement pay during the time that he is appointed if the salary that he receives while on the Commission were to exceed his Army pension.

Mr. BIEMILLER. Mr. Chairman, will the gentleman yield?

Mr. McCORMACK. I yield.

Mr. BIEMILLER. I think the gentleman from Massachusetts is entirely correct. In the past 2 days I have checked with members of the Senate Committee on Atomic Energy and they informed me that in their opinion the bill as it left the Senate would permit any retired officer to serve.

Mr. McCORMACK. The gentleman from Ohio [Mr. ELSTON] made an observation that he has not heard one good reason why a military man should not serve on the Commission. As I look at this bill on page 7 under title "Military Liaison Committee," certainly there is complete protection here of our security from the angle of our military and our armed forces.

The bill provides, in addition to the creation of a Military Liaison Committee, consisting of representatives of the Department and the Navy, after defining their powers:

If at any time the committee concludes that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the departments of War or Navy, derived from the Constitution, laws, and treaties, the committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy. If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. McCORMACK. Yes; I yield.

Mr. ELSTON. Can those things not be done under existing law? If any Army officer is dissatisfied with something that the Commission is doing, can he not appeal to the Secretary of War and cannot the Secretary of War appeal to the President?

Mr. McCORMACK. But this is a provision in law. It is definite. It is governing. What the gentleman refers to is not anything of a governing nature. It is one thing in the practical operation that certain things may happen, but as a matter of law they cannot happen. Here we put it into the bill.

I have given a great deal of thought to putting anyone in active military service on any civilian commission. I am opposed to it on a fundamental basis. I consider it fundamental, in a democracy, that outside of war itself, during peacetime, the relationship of our armed forces to democratic institutions of government should take their normal course.

The CHAIRMAN. The time of the gentleman from Massachusetts has expired.

Mr. McCORMACK. Mr. Chairman, I ask unanimous consent to proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Massachusetts?

There was no objection.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. McCORMACK. Yes; I yield.

Mr. ELSTON. Does not the gentleman feel that a commission such as this, which deals with national defense, is more than a mere civilian commission? As a matter of fact, it is not simply a civilian commission; it is a commission dealing with matters of national defense and civilian interests.

Mr. McCORMACK. That is a matter of opinion. One of the main purposes of this will be the progress that will be made in the future, the use of it in our ordinary everyday life. The security question, I concede, is involved, but I do not concede it is the primary question. Wherever it is involved, wherever it might come to the front as a matter of importance, under the provisions of paragraph (c) on page 7, to which I just referred, absolute power exists for the War Department and the Navy Department to take such steps to assure the national security of our country.

I am firmly wedded to the fact that under the democratic institutions of government, when war is over the military should go back to its normal and proper place in the democracy. They do not perform civilian activities. The purpose of the conduct of our Government from a civilian angle is by civilians, not by any member of the armed forces being placed upon a commission which is civil in its nature.

I think this violates the fundamental rule of democracy that we have adhered to for over 150 years. There is adequate protection within this bill from the security angle to protect our country in case any situation arises where the security of our country is involved, and

that is provided in the paragraph to which I have referred.

The committee amendment violates the spirit and the traditions of American institutions of government in practical operation and should be defeated.

Mr. BATES of Massachusetts. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I think the Members of the House, at least the greater number of us, are quite disturbed about this bill being enacted into law at the present time.

The papers every day carry headline stories emphasizing the great difficulty our representatives are having in the United Nations Organization in their efforts to get some of our allies to agree on the fundamental questions of world peace. It surely can never be said that this Nation has not been interested in world peace. All through the course of our history, we have set the pattern and surely we have made more sacrifices in the interest of world peace than any other country on the face of the earth. You will recall that in 1922, in order that we might establish permanent peace, we entered into a naval disarmament conference and agreed to scrap 29 of our battleships, believing that by so doing, we could have peace in this world. How disillusioned we have been!

We are now perhaps in the most distressing period of our history in times of peace, and when the people of the world are craving for peace, yet, there is no peace to be had because, apparently, we have not yet learned to live together. Why are we at this moment in such a hurry to create this new Commission? Why are we so anxious to change the status of things insofar as the development of this bomb is concerned and the progress we may make in the further development of nuclear energy?

It was only a few weeks ago that we appropriated over \$7,000,000,000 for our Army and over \$4,600,000,000 for the Navy. We are calling the youth of this land into the armed forces because of the most critical period that lies ahead as stressed by President Truman, and because of unsettled conditions that exist everywhere in the world. Why are we so anxious, at this moment, to turn over to another Commission, all information and control, and to take it away from our military authorities at a time, when we are told that our Nation and the world are still in a great emergency.

We are told that we need 1,200,000 men in our Army by next July and that we must maintain a Navy of 500,000 men in the postwar period. I have seen with my own eyes the effect of the atomic bomb. I have visited and been on the spot at Hiroshima and Nagasaki and only recently I returned from Bikini. With these vivid pictures in mind, I say, why all this hurry at a time when there is so much unrest in the world? Why is it we cannot live together in peace and harmony? Why is it that we have not been able to get around a table even before now and establish a pattern of world peace?

It is only because some of our allies apparently still distrust us. How do we know that? We know that because in re-

cent days on the floor of this House, we have had the so-called Dirksen amendment which stipulated that in providing aid through to UNRRA, we must have the authority and the right to send our newspaper men into those countries in which we are giving this relief. Up to the present time none of our representatives has been permitted to visit these areas.

Is there still distrust in this world? If you do not believe there is, then visit Korea; if you doubt there is, travel in North China and see what has been happening there for a long period of time. Talk to our Marines stationed there, discuss the situation with our intelligence officers in the Marine Corps, as I have done, and you will find the real truth as to what is the cause of the present unrest in the world.

The CHAIRMAN. The time of the gentleman from Massachusetts has expired.

Mr. BATES of Massachusetts. Mr. Chairman, I ask unanimous consent to proceed for three additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Massachusetts?

There was no objection.

Mr. BATES of Massachusetts. Mr. Chairman, when we are drafting our youth into the armed services, is this a time to spread the information and knowledge we have of atomic energy? It was only last week on a ship from the Pacific that I viewed a motion picture prepared by the FBI in showing how information was leaking out from the Manhattan Project. Are we going to establish new commissions to spread more information, are we going to have more civilian employees brought into it, or are we going to just hold ourselves for a little while longer, until the United Nations Organization may at the peace conference to be held at the end of this month try to arrive at some foundation for a peace?

Mr. Chairman, we speak about the atomic bomb being the most devastating instrument or weapon ever devised by the mind of man. Yet, on the day after I returned from Bikini last week I clipped from a Honolulu paper in Hawaii the following statement:

POWERFUL NEW WAR POISON CAN SLAY MILLIONS

Figures given with the scientific report of the method of purifying the toxin show that 1 ounce of the pure white, needle-shaped crystals could kill 200,000,000 men each weighing 165 pounds.

These are facts behind the undetailed revelations of naval biological warfare researches made in Congress recently.

This deadly stuff, believed the most poisonous known substance per unit of weight, is only one of the weapons of germ warfare forged by United States scientists during the war.

Surely this germ is more deadly than the atomic bomb. Surely the devastation created by this new germ carries in its wake more horror and destruction than the atomic bomb. Whatever we have heard about the atomic bomb, it does have its limitation. This germ has recently been developed by our United States scientists. Do we want to give that over also to another commission or

do we for the time being, in the face of uncertainty and unrest, want to keep this information to ourselves about atomic energy that cost us over \$2,000,000,000 to create?

Mr. Chairman, for the reasons stated above I hope this bill will be recommitted to the committee until peace can be definitely and permanently established once again in this world.

The CHAIRMAN. The time of the gentleman from Massachusetts has again expired.

[Mr. O'HARA addressed the Committee. His remarks will appear hereafter in the Appendix.]

Mr. KEEFE. Mr. Chairman, I move to strike out the last word.

Mr. Chairman and my colleagues, at long last, after being here 2 days, I finally have a chance, not being a member of the committee, to at least ask a question on this legislation that is declared to be the most important and significant legislation that has ever come before this House. It is because I have heard that repeated so often that I would like to get a little information in order to intelligently vote on the issue that is now before the House. That issue is the amendment offered by the gentleman from California [Mr. JOHNSON] to the committee amendment that appears in italics in the bill.

There has been a great deal of talk about this situation, and we all have had considerable mail and correspondence. There seems to be a feeling that the McMahon bill as it came to the House provided strictly for a civilian commission to administer the subject of atomic energy. I read the bill:

There is hereby established an Atomic Energy Commission (herein called the Commission), which shall be composed of five members. Three members shall constitute a quorum of the Commission. The President shall designate one member as Chairman of the Commission.

(2) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate. In submitting any nomination to the Senate, the President shall set forth the experience and the qualifications of the nominee.

There is not another word in this bill that indicates any prohibition upon the appointing power that would prevent him, as far as I can see, from appointing five representatives of the Army and the Navy. The restriction against service by Army and Navy personnel in civilian status or upon civilian commissions is to be found in other legislation.

I know we have called military men to various civilian commissions. We called them in at the time of WPA, we called them in at the time of the Civilian Conservation Corps, we called them in from the Army to head up housing projects. In each case, as I recall, legislation was passed that would permit those Army officers to serve in civilian capacities. One of the late ones was the authorization of a military man to serve in one of the capacities in the Federal Security Agency.

Is not this the situation, and I am asking for information, as far as this specific bill is concerned, if there were no other

prohibitions in the law the President could appoint five Army generals or five admirals to serve on this Commission?

Mr. ELSTON. May I say to the gentleman that existing law would preclude such an appointment.

Mr. KEEFE. I just said that. I said were it not for the existing law the President could appoint five generals or five admirals.

Mr. ELSTON. If the exception which has been written into this bill does not remain in the bill, such appointments cannot be made.

Mr. KEEFE. I go over to page 8, and I think it is important in the argument on this very question, where in line 19 you attempt to give by another committee amendment the right on the part of the President to appoint not to exceed two active or retired officers of the Army or the Navy. It says, "not to exceed two active or retired officers of the Army or the Navy may serve at the same time as members of the Commission."

Unless you adopt that provision which is found on page 8, an Army or Navy officer would not be permitted to serve on this Commission. Is that true?

Mr. ELSTON. That is correct.

Mr. McCORMACK. I think it refers to an officer on active service.

Mr. KEEFE. I am not going to quibble over the situation as to whether he is in active service or in retired status.

The CHAIRMAN. The time of the gentleman from Wisconsin has expired.

Mr. McCORMACK. Mr. Chairman, I ask unanimous consent that the gentleman be permitted to proceed for five additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Massachusetts?

There was no objection.

Mr. KEEFE. I understand thoroughly there is legislation on the books now which prevents the retired officer from serving in this sort of civilian capacity unless he sees fit to relinquish his retirement pay and take the pay that is provided in the job of civilian status.

Mr. McCORMACK. He can elect.

Mr. KEEFE. He can elect; that is what I understand it to be.

May I invite your attention to the language of this proposed amendment. It states, "at least one of whom shall be a representative of the armed forces." The amendment offered by the gentleman from California, if adopted, would make it read "five members, one of whom may be a representative of the armed forces." Then I turn to the committee report itself which states on the last part of page 6 and on page 7, "This member under that language may be a civilian who at the time of his appointment is designated by the President as being a representative of the armed forces." What are we quibbling about? What is all this argument about? Why, the President can appoint a man, a civilian. He can appoint Joe Doakes if he wants to, and say, "Joe Doakes shall be the representative of the armed services on this Commission." Joe Doakes may never have seen the Army nor the Navy and may never have had any connection with them whatsoever. As this

language reads, he may appoint a representative of the armed forces—a civilian. Then what are we arguing about? I would like to hear some response from someone on this question about which we have been arguing here for 3 or 4 days. It is all a quibble, it seems to me.

Mr. ELSTON. I do not agree that the language "representative of the armed services" would include a civilian. You do not say somebody representing them—you say a representative of those services.

Mr. KEEFE. It says "a representative of both services." Then we have a situation confronting us. We have to depend upon somebody to construe the language in this bill. The minority says we have one construction and the majority has another construction. Who is going to be the judge and who will ultimately construe this proposition? In my opinion, the matter rests with the President of the United States, and he can submit his nominees to the Senate of the United States under the language of this bill and is only required to set forth the experiences and qualifications of the nominees. He can appoint five civilians under this very language, in my humble judgment, he can do this under the very language that the committee is offering to this bill as an amendment. I do not see how there can be a shadow of a doubt about that. The only thing the President would have to do when he makes the appointment is to say, "I designate Joe Doakes to be a representative of the armed services." We are quibbling over this situation. It is all a matter of quibble and speculation as to whether the Navy or the Army shall dominate this situation. It is clear that the intent of the Senate, with which I thoroughly agree, was that there should be a Commission of five civilians. If the President wants to appoint an ex-military man, and that man wants to serve, he may appoint him under the language of the Senate bill. The jurisdiction and the authority is committed clearly to the President of the United States, the only restriction being that the Senate of the United States must confirm the people whom the President nominates.

The CHAIRMAN. The time of the gentleman has expired.

Mr. KEEFE. Mr. Chairman, I ask unanimous consent to proceed for one additional minute.

The CHAIRMAN. Without objection, it is so ordered.

There was no objection.

Mr. KEEFE. I, as one Member of the Congress, am not prepared to say that the Senate of the United States or the President of the United States is going to put on this Commission or permit to be put on this Commission men who will willfully, knowingly, or unintentionally, if you please, throw away the protection and the best interests of the United States of America. If we have reached a point in this country when we say that we cannot trust the President in a matter of this kind and cannot trust the United States Senate to see to it that the interests of America are protected, then I say, God help America and its future. I, for one, am willing to trust the integ-

rity, honor, and patriotism of the President, whoever he may be.

I am willing to trust the integrity and the honor of the men who compose the United States Senate.

The CHAIRMAN. The time of the gentleman from Wisconsin has expired.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this amendment and all amendments thereto close at 3:30 o'clock.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

The CHAIRMAN. The Chair recognizes the gentleman from Tennessee [Mr. JENNINGS] for 1½ minutes.

Mr. JENNINGS. Mr. Chairman, we are still at war. Up to this time the secrecy of the atomic bomb has been safely guarded. A person up in Canada seems to have stolen some uranium and managed to send it over to Russia. He has been convicted and sentenced to jail for 6 or 7 years. Up to this time the Army, Gen. Leslie R. Groves and Gen. Kenneth Nichols, and other magnificent members of the armed services, have kept inviolate this secret. Why slap them on the wrist? Why run the risk, in the dissemination of knowledge with reference to this terrible weapon in time of war? These men have proved true to their trust. No graduate of West Point or Annapolis has ever betrayed his country or any trust or confidence reposed in him. Let us guard the secret of this atomic bomb. We are walking daily in the shadow of a potential war—war with a country that has sought to steal and buy this secret. Let us leave it in the hands of General Groves and the men who up to this time have preserved the secret.

The CHAIRMAN. The time of the gentleman from Tennessee has expired.

The gentleman from Wisconsin [Mr. BIEMILLER] is recognized.

(Mr. BIEMILLER asked and was given permission to revise and extend his remarks.)

Mr. BIEMILLER. Mr. Chairman, I want to pay tribute to the speeches made earlier by the distinguished majority leader and my colleague from Wisconsin [Mr. KEEFE]. I agree heartily with the views they have expressed.

I want to take this brief time to remind the members of the committee that there is a Military Liaison Committee provided for in the bill. The charge has been made on the floor that the War Department loses all control whatsoever over the use of atomic energy for military purposes. The reverse is true.

The bill specifically creates a Military Liaison Committee appointed by the Secretaries of War and Navy; and the Atomic Energy Commission is charged under the terms of the bill with consulting with the Military Liaison Committee on all items which the committee thinks are important to the defense of this country. Note that the military officers appointed by the War and Navy Departments make the decisions as to what aspects of atomic energy questions concern them.

Furthermore, in the event the committee and the Commission get into a disagreement either Secretary may take that disagreement to the President of the United States for solution.

It seems to me we have adequate safeguards in the bill for any military use of atomic energy and I hope this House will see fit to pass the original Senate version of the bill, rejecting the committee amendments and leave us with a Commission in the best American traditions, a civilian Commission from top to bottom.

Mr. COOLEY. Mr. Chairman, will the gentleman yield?

Mr. BIEMILLER. I yield.

Mr. COOLEY. What is the real objection to having a military man on the committee? I have heard objection after objection raised but no one has stated why it would be objectionable.

Mr. BIEMILLER. My objection is the same that has been stated many times; namely, the tradition of America is against any military officer serving on a governmental body. We do not have them in the Cabinet, we do not have them on any Commission. The laws of the United States specifically prohibit them from serving in any civil capacity without an exception being made by the Congress.

Mr. COOLEY. America has no tradition when it comes to dealing with atomic energy. It is something new entirely.

Mr. BIEMILLER. The Secretaries of War and Navy and General Eisenhower have testified that they favor an all-civilian committee. I stand with them.

The CHAIRMAN. The time of the gentleman from Wisconsin has expired.

The gentleman from Iowa [Mr. MARTIN] is recognized for a minute and a quarter.

Mr. MARTIN of Iowa. Mr. Chairman, first of all, I wish to state that this liaison committee has no powers in this matter. They are purely a contact agency for information purposes and giving advice.

What I really rose to speak about at this time however is the very important point made by the gentleman from Massachusetts [Mr. McCORMACK], with reference to eligibility of retired officers or men for service on the Commission. In the general debate yesterday I made the statement that special authorization is needed for the appointment of retired members of the armed forces as well as of members of the active list but I should have limited that requirement to the Director of Military Application and not to members of the Commission except as to matters of pay. I called the Judge Advocate General just after the gentleman from Massachusetts made his statement to verify the limitations and I will give you this as it was reported to me over the telephone in the last few minutes: Title 5, section 62, of the United States Code for 1940, which you will find cited in the enabling section 2 (d) on page 8 of the bill, is a bar to any active officer's holding civil office under the Federal Government; and it also operates against a retired officer's holding such a job. Certain exceptions are made and these exceptions include persons appointed by the President and confirmed by the Senate. Officers on that echelon or that level

are specifically exempted from the law of July 31, 1894. Members of the Commission fall in this category whereas the Director of Military Application does not.

The other enabling legislation on page 8 of the bill has to do with the matter of pay and it is very important to have those provisions include both the retired list and the active list.

I want to thank the gentleman from Massachusetts for bringing that point out so we could get it more definite in the debate.

The CHAIRMAN. The gentleman from Ohio [Mr. ELSTON] is recognized for a minute and a half.

Mr. ELSTON. Mr. Chairman, since there seems to be some question about the interpretation of the word "representative" I have offered an amendment to the committee amendment to change the word "representative" to "member" so the amendment will read "at least one of whom shall be a member of the armed forces."

I believe the word "representative" is sufficient, but since there appears to be some question about it, it perhaps would be well to change it.

I presume the amendment will be voted on after the pending amendment of the gentlemen from California is disposed of.

The CHAIRMAN. The gentleman's amendment is not an amendment to the pending amendment and would have to wait until we dispose of the other first.

Mr. ELSTON. That was my first impression.

The CHAIRMAN. The Chair recognizes the gentleman from Connecticut [Mr. KOPPLEMANN].

(Mr. KOPPLEMANN asked and was given permission to revise and extend his remarks.)

Mr. KOPPLEMANN. Mr. Chairman, my good friend from North Carolina asked the question, What is the objection to military men? Mine is a simple one. A military man on a commission of this nature would have a divided responsibility. The act as it now reads calls for commissioners who are divorced from any and every other activity. They must concern themselves solely with atomic energy problems as they affect the Nation as a whole. A military man's first loyalty is to the interests of the military. If a question came up wherein military and civilian interests conflicted, pro forma his decision would uphold the military.

The bill already grants full provision for the military to appeal to the President of the United States whenever they feel their interests are jeopardized by the attitude of the Commission. Furthermore, the Army and Navy heads, and General Eisenhower have protested that they do not want military representation on the Commission. I would like to ask why the urgency with all the conditions as now written into the Senate bill that the military be adequately recognized, why the demand that they be given supreme authority in a matter that will increasingly pertain to the civilian economy of the Nation?

Mr. COOLEY. Mr. Chairman, will the gentleman yield?

Mr. KOPPLEMANN. I yield to the gentleman from North Carolina.

Mr. COOLEY. Does not the gentleman regard the atomic bomb as an instrumentality of war at the moment?

Mr. KOPPLEMANN. The atomic bomb—like any bomb—is an instrument of war. I would prefer that the bomb not be used at all. But this legislation is above and beyond the application of atomic energy for military purposes alone. We are endeavoring to formulate policy for the application of atomic energy for civilian purposes, for improving the public welfare, raising the standard of living, and promoting world peace. We must now progress from the restricted military use to opening atomic research for peaceful industrial application. Were we to continue to confine ourselves to military application alone this legislation would not be necessary. Our position today is comparable to our position when our scientists began to unearth the potentialities of electrical energy and envisioned the social and industrial revolution that would ensue. The power of electric energy has played its major role in military application too—but the military application has always been subordinate to the national civilian interest, except when in the emergency of war the military necessarily came first, and new inventions and discoveries were given wholeheartedly for the purpose of war. Only now are numerous inventions, developed during the war, and used solely for the war, being made available for civilian application. We have heard of their wondrous achievement during the war, but have yet to enjoy their use in our daily lives.

The CHAIRMAN. The time of the gentleman from Connecticut has expired.

The Chair recognizes the gentlewoman from California [Mrs. DOUGLAS].

(Mrs. DOUGLAS of California asked and was given permission to revise and extend her remarks.)

Mrs. DOUGLAS of California. Mr. Chairman, in answer to the gentleman from North Carolina, we think of the atomic bomb at the moment as when we think of atomic energy; but, nevertheless, if we put all our faith in the future on atomic bombs, and General Eisenhower testified to this as well as General Arnold and general after general, then our future is very insecure indeed. Only peace can assure a future. If we put a military man on the commission it will give us no added security but will be harmfully unnecessary under the section providing for a military liaison committee; we will have every possible military protection by consultation, by direct suggestion from the military by control of military information, decision on how many atomic bombs there will be made and decision as to the amount of fissionable material to be used for military research. That has all been provided in the bill. By putting a military man on the commission we would run the risk of having the world think at this hour, when the scales are balancing between war or peace, that our preoccupation is with war, not with peace.

The proposal to place military members on the Atomic Energy Commission is both unnecessary and harmful.

The case against this amendment to militarize the Atomic Energy Commission is so clear and so compelling from both the military and civilian points of view, that it is possible only to wonder why these proposals were made at all.

Our colleague who told us yesterday that he had prepared this amendment, declared that he wrote it in for the purpose of removing from the bill the disqualification of members of the armed forces.

The one thing that S. 1717, unamended, does not do to the armed forces is to disqualify them. The armed forces are given the utmost power and scope throughout the bill. The amendment would actually detract from the effectiveness of the military in this program.

Most important in the structure of the atomic-energy program here proposed is the Military Liaison Committee.

The Military Liaison Committee consists of an unlimited number of officers detailed by the Secretary of War and the Secretary of Navy to consult continuously with the Atomic Energy Commission. It is the duty of the Atomic Energy Commission to keep the Military Liaison Committee in close touch with all developments, inventions, and activities in the field of atomic energy, most particularly with all matters which might have military significance. The Military Liaison Committee has the responsibility of advising the Atomic Energy Commission on courses of action which it deems desirable.

If the Military Liaison Committee feels that the Atomic Energy Commission has failed to heed a valuable suggestion, or is proposing to take some militarily undesirable course, the Military Liaison Committee is specifically charged in this bill with the obligation of presenting its objections to the Secretary of War or the Secretary of Navy. If either or both of these Cabinet members concur in the Military Liaison Committee's objections to the Atomic Energy Commission's procedure, the objection is brought before the President of the United States—the Commander in Chief. The decision of the President in such a case would be final.

Through their liaison with the Atomic Energy Commission, the Military Establishments would be absolutely free, under this bill, to conduct military research with fissionable materials, to perform such public or secret nuclear experiments as might be necessary, to manufacture atomic weapons, to develop military tactics and strategy in atomic warfare, both defensive and aggressive. Military secrets would be closely guarded by the military, as they are at present. There is no restriction in this bill on military research.

What greater scope, what greater power could the military have in the atomic-energy program than this. What greater scope, what greater power has the military ever had in any governmental or industrial operation, including the munitions business?

These are the reasons why I say to you it is unnecessary to have military members of the Atomic Energy Commission.

And why is it harmful, as well as unnecessary? How would it detract from the effectiveness of the military?

Military membership on the Atomic Energy Commission would limit the power of the otherwise very powerful Military Liaison Committee.

If military men were members of the Atomic Energy Commission, decisions of the Commission would be assumed to have their approval—the approval of the military. This would weaken the role of the Military Liaison Committee in taking exceptions to such decisions. The Military Liaison Committee would be deprived of the force of its procedure. If it went to the Secretaries of War and Navy, protesting actions of the Atomic Energy Commission, it would seem like a farcical intramural fight among the military themselves, rather than a protest from the military against a civilian agency.

Placing military men on the Atomic Energy Commission would be a violation of a fundamental, underlying principle of our Constitution—that the functions of the military and the civilian agencies are kept separate, that the civilian government forms national policy and the military branch is an instrument of the Government for carrying out that policy. The military services do not form national policy. That is an essential concept of democracy. Only in a Fascist, totalitarian state does the military make policy. The Atomic Energy Commission is a policy-making body. The military, through the Military Liaison Committee, can object to any policy and can carry these objections to the President. But the Commission itself, to stay within the framework of our form of government, must be civilian and responsible to the civilian public.

The fact that our President, our Secretaries of War, Navy, and State, and our Congress, all of whom make the national policy relating to war and to peace, are civilians, is the most striking manifestation of our fidelity to this principle in our structure of government. A statute, passed in 1870, expressly prohibits any military officer on active duty status from occupying any position in the civilian government. This statute is a clear expression of our historic separation of military and state.

We have declared to the world that we have peaceful intentions. We have announced to our fellow nations that we believe atomic warfare should be outlawed. Placing military men on the Atomic Energy Commission would give our whole atomic energy program an overt warlike character. It would be an open challenge to an atomic armaments race—a suicidal competition.

The amendment to militarize the Atomic Energy Commission would be the final admission of faithlessness—a mortifying confession that we do not believe in the possibility of peace. And by this confession, we would atomize the possibility of peace. It would be a legislative Bikini.

I beg you to weigh these facts dispassionately and without prejudice—the fact that the armed forces, through the Military Liaison Committee, have a strong

and effective representation in the atomic energy program; the fact that the efficiency of this machinery would be impaired by putting military men on the Atomic Energy Commission as well; the fact that the research program of the military is in no way hampered by the unamended bill; the fact that the separation of military from civilian agencies is a basic principle of democracy; the fact that militarization of the Commission would inspire the mistrust of our own people and the people of the world, and would thus wantonly throw away our single chance for peace. I feel sure that when you have weighed these facts, you will find no single counterbalance to the placing of military men on the Commission; I have confidence that you will agree with me that a vote against this amendment is a vote for peace.

The CHAIRMAN. The time of the gentleman from California has expired.

The Chair recognizes the gentleman from South Dakota [Mr. CASE].

Mr. CASE of South Dakota. Mr. Chairman, with reference to the question of a retired military officer serving on this commission, legislation which the House approved earlier in the session dealt with retired officers who were to serve with the Veterans' Administration. That bill did pass the House and it passed the other body and is now in conference. I find also that we have two amendments to the general statutes to permit retired officers to serve in the diplomatic or consular service and permitting them to appear before departments. I think it would be necessary for us to include language in this legislation if retired officers are to serve on the Atomic Energy Committee.

The CHAIRMAN. The time of the gentleman from South Dakota has expired. All time has expired.

The question is on the amendment offered by the gentleman from California [Mr. JOHNSON].

The question was taken; and on a division (demanded by Mr. JOHNSON of California) there were—ayes 3, noes 94.

So the amendment was rejected.

Mr. ELSTON. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. ELSTON to the committee amendment: Page 3, line 20, strike out the word "representative" and insert in lieu thereof the word "member."

The amendment to the committee amendment was agreed to.

The CHAIRMAN. The question is on the committee amendment as amended.

The question was taken; and on a division (demanded by Mr. MAY) there were—ayes 115, noes 87.

Mr. THOMASON. Mr. Chairman, on that I demand tellers.

Tellers were ordered, and the Chairman appointed as tellers Mr. THOMASON and Mr. MAY.

The Committee again divided; and the tellers reported that there were—ayes 127, noes 96.

So the amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Committee amendment: Page 6, line 1, after the period insert "The Director of the Division of Military Application shall be a representative of the armed forces."

Mr. MAY. Mr. Chairman, I ask unanimous consent to correct the committee amendment to conform with the vote just taken on the amendment to the previous committee amendment by striking out the word "representative" and inserting in lieu thereof the word "member."

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

Mr. THOMASON. Mr. Chairman, I rise in opposition to the committee amendment.

Mr. Chairman, the reasons I have tried to advance in opposition to the amendment which was just adopted are practically the same as I advance in opposition to this amendment except I feel there is even more reason for the rejection of this amendment. We are going to have a peace conference meet in Paris on the 29th day of this month. It is my conviction that having the military predominate and even glorified by this bill is not conducive to the best efforts for establishing peace. I repeat what I said in connection with the remarks of the gentleman from Minnesota [Mr. Judd] on the last amendment, and I do not know that that is so serious from a practical standpoint, but the reason I opposed that amendment was as a matter of policy because I do not regard the military as the policy makers of this country. Ours is a civilian government, and the military are the agents and representatives of the civilian government to preserve and promote peace and provide adequate national defense and to win wars if and when we have any. Atomic energy will I hope be diverted to the pursuits of peace rather than of war and toward the development of scientific research that will bring happiness, peace, and prosperity to not only the people of this Nation, but to the peoples of the earth.

We learned at Hiroshima and in the Pacific what the bomb can do and to now say that the director of this division shall be a military man is just carrying it a little bit too far in my judgment. It is fraught with danger and dissension.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield? The gentleman from Texas says he is afraid that this may endanger the peace of the world. Does not the gentleman also feel that the appointment of General Bedell Smith as Ambassador to Russia and General Marshall as our representative to China may also endanger the peace of the world?

Mr. THOMASON. General Bedell Smith and General Marshall are abroad trying to promote peace and they do not have atomic bombs in their pockets. That is waving a red flag in the face of other people regardless of what their views may be and how much we may disagree with them. If we are ever going to have peace in this world, I do not think we ourselves can be guilty of making the military the supermen in civilian and peacetime activities.

Mr. COOLEY. Mr. Chairman, will the gentleman yield? Does not the gentleman now regard atomic energy as an instrumentality of war and not of peace?

Mr. THOMASON. Of course, it is an instrumentality of war. That is what it has been. But heaven knows I hope that is not the only thing that we are going to do with atomic energy. I want to promote peace, just as I know the gentleman from North Carolina does.

Mr. COOLEY. We are still in the midst of conducting military experiments costing a tremendous amount of money. Does the gentleman think this Commission will be weakened domestically or internationally by putting some capable military man on the committee?

Mr. THOMASON. I think insofar as military advice is concerned that they get that from the military, and they will get it under the terms of this bill without placing military men in high command. We want their advice and cooperation but there is no justification in peacetime for them running the show.

Mr. PRICE of Illinois. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield.

Mr. PRICE of Illinois. Will the gentleman stress the fact that during the development of the atomic bomb this particular division was presided over by a civilian, Dr. Oppenheimer?

Mr. THOMASON. Well, it was the scientists of the country who developed and discovered atomic energy. It is true they had a distinguished and able Army officer there in charge of the business end of it, but you still have to depend on the scientists of the country to develop atomic energy for the aid of medical research, for the development of power, and for the development of all things we hope will come as the result of it, just as we enjoy the blessings of electricity.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield.

Mr. MAY. Does the gentleman admit that this particular amendment would apply only to the director of the particular division that has to do with the military application of atomic energy?

Mr. THOMASON. Yes. I think I would agree to that.

Mr. MAY. In view of the vote that has just been taken on the membership of the Commission, is it not more important that the men on this division be military men?

Mr. THOMASON. Well, I do not think either is necessary or important, especially in view of the fact that the Army will be consulted about this anyway, as well as the Navy. So if we are to have a civilian government and also at the same time have the aid of the military and naval authorities, why put all these high-ranking Navy and Army officers in charge of this division? It is neither necessary nor advisable and this amendment should be defeated.

The CHAIRMAN. The time of the gentleman from Texas has again expired.

Mr. GALLAGHER. Mr. Chairman, much has been said about atomic energy and the atomic bomb. Many references have been made to its beginning with Einstein, the author of the theory of relativity and a man who speaks a lan-

guage that neither you nor I can understand. But I was taught the principles of the split atom 53 years ago in high school.

Let me say further that I am not giving the principal credit for the production of the bomb to the scientists at the present time, for if they had been given the authority to pick their assistants they would have been 10 years late and it would have cost much more than the \$2,000,000,000 it did cost to produce it. The fact of the matter is that the highly trained technicians who carried out the theories were hampered because the scientists did not know their business at every stage of the game; they were hampered in every way, shape, and manner; but eventually the trained fingers of the technicians and that trained organization—in other words, American know-how—produced the atomic bomb. I repeat, Mr. Chairman, that had the scientists been left alone at it, it would have taken at least 10 more years to have produced the bomb; and I want to say that even if another country could produce it, let them spend their \$32,000,000,000, let them hire their technicians if they do not hire the ones that Roosevelt picked, and I venture to say that even with all that they would not have the class of bomb that we have.

Remember also that America wants the land of no other country. America is not an imperialistic nation. She will use what she knows only in the interest of peace.

I believe we are more than 10 years ahead of other countries and I believe in keeping that knowledge to ourselves and under our own control, because I am certain America will not abuse that control.

Mr. SIKES. Mr. Chairman, I rise in support of the amendment.

The CHAIRMAN. The gentleman from Florida is recognized for 5 minutes.

(Mr. SIKES asked and was given permission to revise and extend his remarks.)

Mr. SIKES. Mr. Chairman, I am unable to follow or to comprehend the alarm which appears to attend our efforts to secure the inclusion of military personnel in this program. At no point, as some have indicated, do we attempt to place control of the atomic program in the hands of representatives of the War or Navy Departments. Let us take a look at the record and see just where we stand. The bill provides:

There are hereby established within the Commission: (A) a general manager—

We did not ask that he be a military man. Then the bill provides that there shall be established a Division of Research. We did not ask that the director of that division be a military man.

There is established a Division of Production. We have not asked that the head of the Division of Production be a military man.

There is also established a Division of Engineering, and we did not ask that the head of that division be a military man. But then there is the Division of Military Application and we simply are asking that the people who fight this Nation's battles and who win its wars on the field of battle shall be the people who shall decide the policies of the

Division of Military Application. They are the people who test and use the equipment. They are the ones primarily whose lives are at stake. That they should direct the policies of their own department seems to me to be reasonable enough and it seems to be perfectly in keeping with the action we have just taken in voting to include one or more persons from the armed forces on the personnel of the Commission.

I think we all are agreed here, as has been pointed out time after time, that the only real value of atomic energy at the present time is its military value. We hope it will have other values in the future, we are confident that other values will be developed, but at the moment the only value it has is its military value. It has been pointed out in the bill that the paramount objective of our present effort is the common defense and security of this Nation. That is what this amendment seeks to implement.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. SIKES. I yield to the gentleman from Kentucky.

Mr. MAY. I think I can recall that in the testimony before our committee the distinguished Mr. Compton, president of the Massachusetts Institute of Technology, testified that it would probably be 10 years before the civilian uses of this thing will be utilized to any great extent. Are we going to wait all that time and allow the other features of the military application of it to be wandering around?

Mr. SIKES. I would like to emphasize that in no way can the action of our committee be construed as an attempt to turn the field of atomic energy control over to military personnel. We seek to give them a voice in it, a voice which they need in order to carry on the defense and to further the security of this country. That is all we are trying to do. I urge the adoption of the committee amendment.

Mr. ELSTON. Mr. Chairman, I offer an amendment to the committee amendment.

The Clerk read as follows:

Amendment to the committee amendment offered by Mr. ELSTON: Page 6, line 2, after "(a)", strike out the word "representative" and insert the word "member" in lieu thereof.

Mr. MAY. Mr. Chairman, that amendment has already been adopted.

Mr. ELSTON. It was an amendment to the other section.

The CHAIRMAN. No. It was to this section.

Mr. ELSTON. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, when I was speaking before I did not have the opportunity to refer to the testimony of General Groves which he gave before the Committee on Appropriations. You will recall that recently we appropriated \$375,000,000 for the Manhattan project for the purpose of carrying on its work and for further research in connection with atomic energy. There has been raised in debate a question about whether or not the work carried on by the Army will be beneficial at all from an industrial standpoint. So I want to read from the testimony of

General Groves before the Appropriations Committee during the month of May of this year.

The gentleman from Florida [Mr. HENDRICKS] asked this question:

Mr. HENDRICKS. General, the public sometimes gets the idea that the Army should not be in control of the atomic bomb and that it should be turned over to the scientists and let them develop energy for industrial uses and for the use of the public. Can you give us a statement as to whether or not the development of atomic energy for the use of the public is being delayed by the fact that the Army controls the atomic bomb?

General GROVES. The fact that the administration of the atomic-energy program is under the Army, in my opinion, neither impairs nor delays in any way the development of atomic energy for peacetime uses. As a matter of fact, I think that the administration by the Army—and I may be a little biased as the Administrator—has been of such a nature that, in fact, the peacetime uses of atomic energy will be discovered much sooner than they would be otherwise, and that they will be developed on a broader and on a much better basis than they would have been otherwise.

Mr. HENDRICKS. And our scientists are now working with the Army along that line?

General GROVES. Yes.

Mr. HENDRICKS. Doing experimental work?

General GROVES. We are doing considerable work in development of this energy for peacetime use. We are arranging, for example, the distribution of radioactive isotopes for research programs. They are very difficult to make. They are dangerous to make, and they are—most of them—involved in unknown processes. We are arranging to do that and we are doing it in close cooperation with the National Academy of Sciences in Washington, and we expect that as soon as possible the actual distribution will take place.

I submit, Mr. Chairman, that that is an answer to the claim of some that if the Army continues its control of the Manhattan project or has any voice in the affairs of the Commission, that they will delay the development of atomic energy for industrial purposes.

I want to join in the statement that the gentleman from Florida [Mr. SIKES] just made that it is exceedingly important that the member of the Military Application Committee be from the armed services. If you will read the section you will find that he can do nothing except under the direction of the Commission, for it is provided:

The Commission shall require each such division to exercise such of the Commission's powers under this act as the Commission may determine—

Since the Director of the Division of Military Application will be engaged entirely in the handling of military matters, its head should be someone who is trained in military subjects.

Mr. GAVIN. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, yesterday the speakers repeatedly impressed upon us the fact that S. 1717, an act for the development and control of atomic energy, was without question the most important legislation that has ever been presented to this House.

Faithfully I listened to the debate. However, nothing was said that would cause me to change my mind, except the remarks of my good friend, the gentleman from Texas [Mr. LANHAM]. I ask

the Members to read the remarks of this distinguished and able gentleman; it will give you something to think about. We again heard about the consequences if we did not take this legislation and what would happen to us. They are the same old catalog arguments that have been presented on almost every piece of legislation that has come before the House: You take this—or else.

The committee has been working on this legislation for some several months, and as stated by many speakers, the more they discussed it the less they knew about it and the more confused and befuddled they became. How can the Members of the committee expect to present this legislation to the House and in a couple of hours digest it and determine what should be done?

One of the speakers yesterday pointed out why we should accept this legislation, and then pointed out why we should not accept this legislation. Was for it and against it. Pointed out the consequences we would suffer and the trouble it would cause if we accepted it, and the consequences we would suffer if we did not take it.

Then the argument against having a member of the War Department represented on the Commission. Personally, I feel the War Department should control the Commission. The atomic bomb, and the further development and control of atomic energy, to my way of thinking, is a weapon of war and has been in the hands of the War Department. And the War Department has done a good job. We have thus far had no difficulty whatsoever in the handling of atomic matters. Now we propose to get civilians in on it. A civilian commission is going to direct the show. Why do not we mind our own business and let well enough alone until it is firmly established what direction the affairs of the world may take.

We seem to be in a sharing mood. Share everything, even though it may eventually destroy us. I wonder if it has ever occurred to any of the Members of the House how much consideration would be given us if some of the other countries of the world had the atom bomb and we insisted they share it with us? Now does not that make you laugh when you think of the attitude some nations have assumed in world affairs?

Now we want to enact legislation which will involve us in atomic-energy discussions with these same nations. Why not mind our own business and leave the matter rest with the War Department until such a time as the nations of the world indicate to us in no uncertain terms that they want Peace. I have faith in the character, integrity, and ability of the War Department and in their brilliant records in World Wars I and II. I have faith that they can handle this matter satisfactorily, not alone satisfactorily to the Congress, but to the people of this Nation and the world as well.

This legislation should be given further thought and study before any hurried action is taken by this House which we may have cause to regret.

I am in favor of this proposed bill, shall vote for the amendment, and shall vote to recommit the bill for further study.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this amendment and all amendments thereto close at 4:20 p. m.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

Mrs. DOUGLAS of California, Mr. FOLGER, and Mr. COOLEY objected.

Mr. MAY. Mr. Chairman, I move that all debate on this amendment and all amendments thereto close at 4:20 p. m.

The motion was agreed to.

The CHAIRMAN. The Chair recognizes the gentlewoman from California [Mrs. DOUGLAS].

Mrs. DOUGLAS of California. Mr. Chairman, there is a difference between putting a military man in as head of the Division of Military Application and putting a military man on the Commission. The Commission will make policy. The Division will be concerned directly with research. This is work for a scientist. During the war radar, rockets, fighter planes, jet-propelled engines, proximity fuses, and atomic bombs were all discovered and developed either by the Office of Scientific Research and Development or the National Advisory Committee of Aeronautics. None of these discoveries were made or developed under the Army and the Navy, and the Army and the Navy would be the first to say so. They may have been carried out under contract with the Army and the Navy, but they were not made in the Army and Navy laboratories.

The head of the Los Alamos Laboratory was a man named Dr. Oppenheimer, a civilian. The head of that laboratory now is Dr. Bradbury, a civilian. It is in Los Alamos that the atomic bombs are made and that military research will be carried on. We need a scientist at the head of the Division of Military Application, if scientific research in this field is to go ahead. Making an atomic bomb is not a production job, it is a laboratory job, and it takes a scientist to do it.

The CHAIRMAN. The Chair recognizes the gentleman from New York [Mr. BUCK].

Mr. BUCK. Mr. Chairman, many thoughtful and able Members of this House, whose opinions all of us respect, have proposed that nothing would be lost and that much might be gained by postponing atomic-energy legislation 6 months or longer. I submit, Mr. Chairman, that there is a compelling reason why such postponement would be contrary to the basic philosophy of our form of government. Nothing is more firmly grounded in our beliefs than that military authority in America must be subordinate to civilian authority. Yet, if this legislation is now postponed, the military are left in sole control of a force so awful as to endanger the very existence of the world. When our country has been endangered in the past, have we replaced a President of the United States with an admiral or a general? Of course we have not. We believe in civilian control. That is the reason this legislation should not be postponed.

The CHAIRMAN. The Chair recognizes the gentleman from Iowa [Mr. MARTIN], a member of the committee.

Mr. MARTIN of Iowa. Mr. Chairman, I want to call attention at this point to the fact that the Director of Military Application is appointed by the Commission and is therefore not exempt from the disability existing as to the holding of civilian appointive jobs in the same manner that the members of the Commission itself are exempt. Therefore, to qualify a retired officer or enlisted man, as well as an active officer or enlisted man for this job, we will have to put in enabling legislation which appears in section 2 (d) on page 8 of the bill. I, for one, cannot imagine turning over the military application of this superweapon of all times to a civilian and providing that that particular job shall not be filled by a member of the armed forces. If there is any position created by this legislation for which members of the armed forces should be eligible, it is this particular job of Director of Military Application. We have 1,500,000 men who are making the Army or Navy their career, and there are many highly qualified men among them who could take over the responsibility of the directorship of military application which we are now considering. For that reason, I am vigorously supporting the committee amendment.

The CHAIRMAN. The Chair recognizes the gentleman from California [Mr. VOORHIS].

Mr. VOORHIS of California. Mr. Chairman, I would like to just ask this question: Whether it does not seem very "logical" that the Secretary of War should be a military officer. But he is not, and never has been in the United States. I am against this amendment for a little different reason than the ones advanced. A number of Members have said that this work of the production of military atomic weapons has been well carried on. If so, it would not seem wise to change the fact that a civilian has been at the head of it and that a civilian is now at the head of it. As a matter of fact, the atomic bomb was not produced by men in uniform, but by scientists. As a matter of fact, I believe it would be good policy and a fine gesture if we did not produce more bombs during the time while negotiations are in progress to try to bring about international controls. But I am not in favor of abandoning our further development, research, or experimentation in the military field until we get the international control upon which some of us believe everything depends. If I feel that way, I feel it would be unwise to run the risk of making a change here which, in my judgment, will be calculated to decrease the efficiency of the military application work. Remember, this only has to do with scientific work. It does not have to do with what you do with your military equipment afterward, but only with the scientific work in the field of atomic energy. If you want that development to continue, it would seem wise to listen to the counsel of the only people who know how to do it. I believe it would be wiser to have a civilian head this agency. I grant all the arguments on the other side may

sound logical. I, too, believe it sounds logical—military application—military man in charge. But the fact of the matter is the admirals, for example, do not direct the construction of battleships. An admiral runs a battleship afterward, but he does not build it.

Mr. COOLEY. Mr. Chairman, in the month of January through the dust of dead men I walked to the heart of a city of silence. I looked upon the cold, gray ashes, the mortal coils of the countless dead, I saw Hiroshima. My mind toyed with the tender sensibilities of my heart. I could not laugh; I was not happy, neither could I be sad or permit myself to become sentimental. I could not be sorry that it had happened, for I realized that Hiroshima was but a prelude to the abject surrender of a ruthless enemy. Frankly, I could not comprehend the real meaning of it all. In vain I tried to contemplate the magnitude of the devastation I was witnessing. Hiroshima, a thriving city of many thousands, dedicated to a dying cause, had, within the twinkling of an eye, been swept from the shores of sound to the great realms of silence, and I was certain that not a tear had been shed by any man, woman, or child who was devoted to the cause of liberty.

The dead cities of Hiroshima and Nagasaki are silent witnesses of the effective forces of atomic energy and the seared and dying flesh on the bodies of the few survivors supply the living testimony which speaks of destruction the like of which the world has never before witnessed. Atomic energy is at the moment an instrument of destruction. It is an implement of war. At some distant date man may be able to harness it and to use it in the prosecution of the pursuits of peace, but everyone admits that it is now the deadliest instrument of destruction that the genius of mankind has devised. I for one am therefore anxious to guard it, and every part and parcel of it, as carefully and as cautiously as it is possible for us to do.

If military men or others owing allegiance to this country were to divulge the secrets of the atomic bomb at this time, they would be guilty of treason and would be subject to the penalties of death. Do we need others to help keep the secrets involved in this mysterious and destructive power? Are we so anxious to apply this terrific force and energy to other and more beneficial uses that we are willing now to imperil the military secrets that are now being kept inviolate? All this talk about international psychology and the effect that the withholding of the secrets of the atomic bomb may have upon other people of the world just does not appeal to me at the moment. We are told that we should throw away our guns before we go to the peace table. If this argument is carried to its logical conclusion, we should by the same token disband our armies and sink our navies and at a time when we are very much afraid—yes, we are afraid—of the dreadful and uncertain future.

I believe that the time has come when all men of all nations should deal fairly and frankly one with the other. I be-

lieve that the time has come when we should insist upon an immediate termination of unilateral transactions which have handicapped and embarrassed our military men during the war and since war ended. If we have an ally which will not even permit our highest ranking military officers to inspect freely territory which has been conquered or liberated by our joint efforts, and if we have an ally that is unwilling to advise us fully regarding postwar plans and programs, an ally which will tell us nothing of her resources or manpower and nothing of demobilization plans, if any have been adopted and approved, should be disclose all of our secrets and deliver up all of our instruments of destruction, not knowing what use may be made of them in the near or distant future? Certainly the world knows that America will never use the atomic bomb or any of its secrets in aggressive warfare, but, certainly, this does not mean that we should share the secrets with all the world.

Not a single sound argument has been made in opposition to the pending amendment. No reason has been shown why a member of the armed forces of America should not serve upon the committee, and I, frankly, do not believe a single such argument can be made. Technically, we are still at war. The atomic bomb is an instrument of war and we still have confidence in the members of our armed forces and I am willing for the high ranking men in our armed forces to know and be advised fully concerning all of the developments of atomic energy. I believe that the amendment should be adopted. Its adoption will strengthen rather than weaken the committee which, if finally established, I hope, will guard with its life all of the military secrets and all of the future developments which may play a vital part if war should ever again curse civilization.

The CHAIRMAN. The time of the gentleman from North Carolina has expired.

The gentleman from North Carolina [Mr. FOLGER] is recognized for 2 minutes.

Mr. FOLGER. Mr. Chairman, I am distressed that there is now about to be written, with what has already been done, all over the face of this bill the substantial announcement to the world that we are particularly engaged in an effort to enlarge our military preparations for some kind of a war. Coming back to what we did a while ago, "At least one of whom shall be a member of the armed forces." That is not said about any other part of this Commission, that it is to be this man or that man in civilian life, a man of any particular employment.

Then we turn from there and the next thing we see is, "Division of Research." No requirement as to who he shall be. Division of Production. No requirement as to who he shall be. Division of Engineering. Then we go down to the Division of Military Application, and we added this amendment in bold type, "The Director of the Division of Military Application shall be a member of the armed forces." Then we turn to the next

page and we see "Military Liaison Committee," with all kinds of power, with the right to tell the Commission what they want and what they shall do; and if they do not do it, then to appeal to the President for him to say whether they shall have their authority or not. It looks militaristic from beginning to end when you put all those things in here. I am sorry that this has been the case by these amendments, placing us in the position of hurrying to announce we are, above all, concerned with military control of the policies of this bill.

The CHAIRMAN. The time of the gentleman from North Carolina has expired.

All time has expired.

The question recurs on the committee amendment as modified.

The amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 8, line 6:

"(d) Appointment of Army and Navy officers: Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 ed., title 10, sec. 576), section 212 of the act entitled 'An act making appropriations for the legislative branch of the Government for the fiscal year ending June 30, 1933, and for other purposes,' approved June 30, 1932, as amended (U. S. C., 1940 ed., title 5, sec. 59a), section 2 of the act entitled 'An act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June 30, 1895, and for other purposes,' approved July 31, 1894, as amended (U. S. C., 1940 ed., title 5, sec. 62), or any other law, not to exceed two active or retired officers of the Army or the Navy may serve at the same time as members of the Commission, and any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to their commissioned status as such officers. Any such officer serving as a member of the Commission or as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in paragraph (2) or (4) (B), as the case may be, of subsection (a) of this section."

The CHAIRMAN. The question is on the committee amendment.

The committee amendment was agreed to.

Mr. JOHNSON of California. Mr. Chairman, I offer an amendment to section 2.

The Clerk read as follows:

Amendment offered by Mr. JOHNSON of California: Page 3, line 23, after the word "Commission", add the following: "Not more than three of whom shall be members of any one political party."

The CHAIRMAN. The gentleman from California is recognized for 5 minutes on his amendment.

(Mr. JOHNSON of California asked and was given permission to revise and extend his remarks.)

Mr. JOHNSON of California. Mr. Chairman, I am a little discouraged at the experience I have had in offering amendments. Let me say, however, that every amendment I have offered I thought was helpful and would improve the bill.

The amendment I am offering here is to insure that the Commission members will not be completely taken from one party. I realize that the men who will be appointed should be men of high caliber and men who have no particular interest in politics, but when I look back and see what happened to the Supreme Court of the United States, when I find that eight members of it were of one political party, when there are public statements made that men were appointed because they were members of a party, I am a little apprehensive of what could happen under this bill to this Commission.

Undoubtedly the President will want to appoint men on their qualifications only, irrespective of their party affiliations, but the thing that worries me is that I do not believe the men who surround the President of the United States will let him do that. They will want men placed on the Commission who have some political value to the party, and the pressure that might be placed on the President to put those party men on who ostensibly have the qualifications would be so great that he could not resist it. That is the only purpose of offering this amendment. We have this same principle in the Federal Power Commission, we have it in the Federal Trade Commission. I believe this amendment would insure the Commission being bipartisan by not having more than three members of one political party. That means the other two would be from other political parties. It seems to me it is a very sound safeguard to place on the President in the appointments that he will make to this Commission.

Mr. BAILEY. Mr. Chairman, will the gentleman yield?

Mr. JOHNSON of California. I yield.

Mr. BAILEY. Is it not safe to assume that all these appointees will be Americans?

Mr. JOHNSON of California. Certainly.

Mr. BAILEY. Does not that answer the question?

Mr. JOHNSON of California. That does not answer my question, which is a silly and frivolous one. It is safe to assume that every member of the Supreme Court will be an American, but we know from our experience that every day certain men from the Supreme Court are dabbling in partisan politics.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. JOHNSON of California. I yield.

Mr. THOMAS of New Jersey. If there ever was an amendment offered to this bill or a statement made by any Member in connection with anything having to do with the bill that shows how ridiculous the bill is, it is the gentleman's amendment, and I will tell him why. We hope to get the right kind of people on the Commission—not Democrats, not necessarily Republicans, or anything else, but the gentleman is making a political issue out of it.

Mr. JOHNSON of California. I am not making any political issue out of it at all. The gentleman from New Jersey is the one who takes the biased view in this case by continually dragging in Commu-

nists and other red herrings. I am trying to insure that we will have a balanced Commission. I am trying to take away from the President the pressure that will be put on him to put people in there because of their politics.

Mrs. ROGERS of Massachusetts. Mr. Chairman, will the gentleman yield?

Mr. JOHNSON of California. I yield.

Mrs. ROGERS of Massachusetts. I would just like to give the gentleman the date on which the agreement was reached between Great Britain, Canada, and the United States. It was reached by Truman, Attlee, and King on the 5th of November 1945. Prior to that time the Chiefs of Staff negotiated the agreement.

Mr. JOHNSON of California. That has nothing to do with my amendment.

Mrs. ROGERS of Massachusetts. I agree it has not.

Mr. JOHNSON of California. And it should be put in at the appropriate place.

I hope the Committee of the Whole will accept this amendment in the spirit in which I have offered it. As I said before, I want a balanced Commission, I want the best men we can get, and I want to take the heat off the President so he can select that kind of men and not have to listen to party politicians.

The CHAIRMAN. The question is on the amendment offered by the gentleman from California [Mr. JOHNSON].

The question was taken; and on a division (demanded by Mr. COLE of Missouri) there were—ayes 38, noes 69.

Mr. JOHNSON of California. Mr. Chairman, I demand tellers.

Tellers were refused.

So the amendment was rejected.

Mr. MAY. Mr. Chairman, I ask unanimous consent that the bill may be considered as read and that the amendments be called up and voted on as they appear in the bill.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

Mr. THOMAS of New Jersey. Mr. Chairman, I object.

The Clerk read as follows:

RESEARCH

SEC. 3. (a) Research assistance: The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development activities in the fields specified below by private or public institutions or persons and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields. To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, grants-in-aid, and loans) for the conduct of research and development activities relating to—

- (1) nuclear processes;
- (2) the theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) utilization of fissionable and radioactive materials for medical, biological, health, or military purposes;
- (4) utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and
- (5) the protection of health during research and production activities.

The Commission may make such arrangements without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the

Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and may make partial and advance payments under such arrangements, and may make available for use in connection therewith such of its equipment and facilities as it may deem desirable. Such arrangements shall contain such provisions to protect health, to minimize danger from explosion and other hazards to life or property, and to require the reporting and to permit the inspection of work performed thereunder, as the Commission may determine; but shall not contain any provisions or conditions which prevent the dissemination of scientific or technical information, except to the extent such dissemination is prohibited by law.

(b) Research by the Commission: The Commission is authorized and directed to conduct, through its own facilities, activities and studies of the types specified in subsection (a) above.

Mr. CLASON. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. CLASON: On page 11, line 2, after the period on line 2, insert "The armed services, as well as private individuals, shall be permitted to engage in independent military research and to enter into research and development contracts with nongovernmental organizations provided that all such contracts are made subject to the provisions of this bill."

Mr. CLASON. Mr. Chairman, this amendment is taken from the words in the report of the Senate committee which are set forth on page 58. The amendment is based upon the statement of Mr. Kenney, the Assistant Secretary of the Navy. In his testimony before our committee he pointed out that the Navy is in a unique position; that the Navy is the greatest user of power and the largest power engineering organization in the world, which gives it an interest in the development and application of atomic energy for power uses.

Then he goes on to say that these ships have to carry fuel, and if they can use atomic energy it will mean much to them. He pointed out also that there are two propositions which, in connection with this bill, have given the Navy great concern. The first of them has to do with whether or not the armed services would be adequately taken care of on the Atomic Energy Commission. I believe that adequate protection for the Navy's interests will be furnished by any commission which is appointed.

The second proposition is whether the armed services will be free to continue its energetic program of research and development in the field of atomic energy. In connection with that program he pointed out that the Navy Department is at the present time engaged in a very large research and development activity. They have contracts with outside private firms and they wish to carry them on. Their point is that unless an amendment is offered in this bill the Navy must rely upon an interpretation of the provisions in this bill made in the report of the Senate committee to carry on these contracts and this research development.

Unfortunately the House committee in its report on page 8, section 3, research, makes no mention whatsoever as to the right of the armed services, either the

Army or the Navy, to carry on their own development and research work. Because of that there is no interpretation by the House or its committee as to what the Army and the Navy would be able to do.

In view of the position of the Navy Department Mr. Kenney stated that the Navy Department is vitally interested in the development and use of atomic energy for many purposes, particularly as a source of power in ship propulsion. Plans are already under way whereby an extended program of research and development will be undertaken in the near future in the field of atomic power for use in ship propulsion.

The Navy's plans contemplate that eventually such a program will be carried out by projects placed with governmental organizations, including naval laboratories, and by means of contracts with private educational institutions and commercial organizations.

In view of the statement made by the Assistant Secretary, Mr. Kenney, I feel that the House ought to protect the armed services in this regard. The only purpose of this amendment is to put in this bill words which will indicate that the House agrees with the Senate, that the proper interpretation of this bill is that the armed services may go ahead with the work which they have already carried on with such outstanding success during the war. In peace it is going to mean much more to the United States insofar as the Navy and the Army are concerned if they can continue the development and research work which they have been heading up over the last 5 years.

For that reason I have offered this amendment, and unless it is in the bill, as I see it, the Navy might be wiped out by the absolute terms of this legislation from continuing work on which they have already expended millions of dollars and upon which they have a program which will also run into more millions. I feel it is very important that the Navy and the Army should be allowed to carry on the work which they have developed so well in the past.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Massachusetts [Mr. CLASON].

The amendment was rejected.

Mr. MATHEWS. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. MATHEWS: On page 9, line 16, strike out "grants-in-aid."

Mr. MATHEWS. Mr. Chairman, the purpose of this amendment is to prevent the giving of a blank check of unknown millions of the taxpayers' dollars for unnamed purposes to an unformed body of men. This Commission will be in a position of spending many millions and billions of dollars, particularly in paying for patents and royalties thereon, and for its own expenses and salaries. I do not think we should go so far as to give it a blank check in the form of grants-in-aid. Therefore, I think the amendment should be adopted.

More important, however, I am of the belief from talking to several Members of this House that they and outsiders

in business and industry are laboring under a misconception about this bill. This misconception is simply this. They are assuming that under the provisions of this bill the necessity for obtaining a license and the ability to obtain that license will be simultaneous. That is not correct. The moment the President signs this bill, if it is passed all restrictions on ownership, on export and import, on transfer, and in every other respect will go into effect. The requirements for the licenses will go into effect, but there will be no place to get the licenses. That creates the gap, the hiatus, of which I spoke this morning, which will put the whole industry in an uproar and confusion.

A man using fissionable material or facilities in his own industry for his own business will go to his lawyer and say, "Tell me what I can do under this Act without a license, or what I have to have a license for." If his lawyer is very, very smart he might be able to tell him. If he tells him what he needs a license for, the man may say, "Get me a license." The lawyer will say, "I cannot. The Commission is not formed, it has no organization, it has no employees, it has no forms of application, it has no personnel to make an inspection, and it has nobody to make a decision." That is the situation the industry will be in if this bill is passed and is then signed by the President.

Mr. CASE of South Dakota. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. I yield to the gentleman from South Dakota.

Mr. CASE of South Dakota. I hope the gentleman's amendment will be adopted, for the further reason that the Commission is the judge of its own expenditures. Under the language of the bill on page 52, the General Accounting Office will not have the usual accounting authority over the Commission.

The bill provides that—

The acts appropriating such sums may appropriate specified portions thereof to be accounted for upon the certification of the Commission only.

In other words, the Commission alone will decide about these grants-in-aid, and they cannot be restricted or examined by the General Accounting Office.

Mr. MATHEWS. That is right. That is why it is a real blank check.

The CHAIRMAN. The question is on the amendment offered by the gentleman from New Jersey.

The question was taken; and on a division (demanded by Mr. MATHEWS) there were—ayes 60, noes 55.

Mr. HINSHAW and Mr. BIEMILLER demanded tellers.

Tellers were ordered, and the Chairman appointed as tellers Mr. MAY and Mr. MATHEWS.

The Committee again divided, and the tellers reported that there were—ayes 79, noes 68.

So the amendment was agreed to.

The Clerk read as follows:

PRODUCTION OF FISSIONABLE MATERIAL

SEC. 4. (a) Definition: As used in this act, the term "produce," when used in relation to fissionable material, means to manufacture, produce, or refine fissionable material, as distinguished from source materials as

defined in section 5 (b) (1), or to separate fissionable material from other substances in which such material may be contained or to produce new fissionable material.

(b) Prohibition: It shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

(c) Ownership and operation of production facilities:

(1) Ownership of production facilities: The Commission shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (A) are useful in the conduct of research and development activities in the fields specified in section 3, and (B) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

2. Operation of the Commission's production facilities: The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) Operation of other production facilities: Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) Irradiation of materials: For the purpose of increasing the supply of radioactive materials, the Commission is authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

(e) Manufacture of production facilities: Unless authorized by a license issued by the Commission, no person may manufacture, produce, transfer, or acquire any facilities for the production of fissionable material. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish and shall be issued in accordance with such standards and upon such conditions as will restrict the production and distribution of such facilities to effectuate the

policies and purposes of this act. Nothing in this section shall be deemed to require a license for such manufacture, production, transfer, or acquisition incident to or for the conduct of research or development activities in the United States of the types specified in section 3, or to prohibit the Commission from manufacturing or producing such facilities for its own use.

Committee amendment:

On page 12, line 20, after the comma, insert "except as authorized by the Commission."

Mr. MAY. Mr. Chairman, that merely means that without that amendment the Commission would not be able to subcontract in the letting of licenses. This was put in by the committee to enable them to expand their operations to small business.

The CHAIRMAN. The question is on agreeing to the committee amendment.

The committee amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Committee amendment: Page 13, line 20, strike out the word "is" and insert "and persons performing pursuant to section 3 (a), section 4 (c) (1) (A) and (B), or section 7 are."

Mr. MAY. Mr. Chairman, I offer a corrective amendment to the committee amendment.

The Clerk read as follows:

Amendment offered by Mr. MAY as a substitute for the committee amendment: On page 13, line 20, strike out the word "is" and insert in lieu thereof the following: "and persons lawfully producing or utilizing fissionable material are."

The substitute amendment was agreed to.

Mr. HINSHAW. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. HINSHAW: On page 11, line 18, after the word "Commission", insert a comma and the words "as agent of and on behalf of the United States."

Mr. HINSHAW. Mr. Chairman, I hope the committee will agree to this amendment. I would like to call attention to the prohibition contained in line 11, page 11, which reads:

It shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

If you will note the language on page 43, lines 4, 5, and 6, the Commission is authorized to acquire and purchase land and hold real and personal property as agent of, and on behalf of, the United States.

The language I have used here is identical with that language on page 43.

My reason for offering the amendment is because of the definition in the bill of the term "person" and referring now back to the prohibition on page 11:

It shall be unlawful for any person to own any facilities—

Please note that the definition of the term "person" means not only any individual, corporation, partnership, and so forth, but it means also the United States or any agency thereof. The United States is included in the term "person."

I merely ask for the insertion of these words, Mr. Chairman, in order that this section shall be in such form as not to conflict with the definition of the term "person."

I hope the chairman of the committee will agree to accept the amendment, as I think it clarifies the matter. It is purely clarifying in nature.

I yield back the balance of my time.

The CHAIRMAN. The question is on the amendment offered by the gentleman from California.

The question was taken; and on a division (demanded by Mr. HINSHAW) there were—ayes 49, noes 2.

So the amendment was agreed to.

The Clerk read as follows:

Page 14, line 14:

"CONTROL OF MATERIALS

"SEC. 5. (a) Fissionable materials:

"(1) Definition: As used in this act, the term 'fissionable material' means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material or any material artificially enriched by any of the foregoing; but does not include source materials, as defined in section 5 (b) (1).

"(2) Government ownership of all fissionable material: All right, title, and interest within or under the jurisdiction of the United States, in or to any fissionable material, now or hereafter produced, shall be the property of the Commission, and shall be deemed to be vested in the Commission by virtue of this act. Any person owning any interest in any fissionable material at the time of the enactment of this act, or owning any interest in any material at the time when such material is hereafter determined to be a fissionable material, or who lawfully produces any fissionable material incident to privately financed research or development activities, shall be paid just compensation therefor. The Commission may, by action consistent with the provisions of paragraph (4) below, authorize any such person to retain possession of such fissionable material, but no person shall have any title in or to any fissionable material.

"(3) Prohibition: It shall be unlawful for any person, after 60 days from the effective date of this act to (A) possess or transfer any fissionable material, except as authorized by the Commission, or (B) export from or import into the United States any fissionable material, or (C) directly or indirectly engage in the production of any fissionable material outside of the United States.

"(4) Distribution of fissionable material: Without prejudice to its continued ownership thereof, the Commission is authorized to distribute fissionable material, with or without charge, to applicants requesting such material (A) for the conduct of research or development activities either independently or under contract or other arrangement with the Commission, (B) for use in medical therapy, or (C) for use pursuant to a license issued under the authority of section 7. Such material shall be distributed in such quantities and on such terms that no applicant will be enabled to obtain an amount sufficient to construct a bomb or other military weapon. The Commission is directed to distribute sufficient fissionable material to permit the conduct of widespread independent research and development activity, to the maximum extent practicable. In determining the quantities of fissionable material to be distributed, the Commission shall make such provisions for its own needs and for the conservation of fissionable material as it may determine to be necessary in the national interest for the future development of

atomic energy. The Commission shall not distribute any material to any applicant, and shall recall any distributed material from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as may be established by the Commission, or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

"(5) The Commission is authorized to purchase or otherwise acquire any fissionable material or any interest therein outside the United States, or any interest in facilities for the production of fissionable material, or in real property on which such facilities are located, without regard to the provision of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under contracts for such purposes. The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

"(b) Source materials:

"(1) Definition: As used in this act, the term "source material" means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

"(2) License for transfers required: Unless authorized by a license issued by the Commission, no person may transfer or deliver and no person may receive possession of or title to any source material after removal from its place of deposit in nature, except that licenses shall not be required for quantities of source materials which, in the opinion of the Commission, are unimportant.

"(3) Issuance of licenses: The Commission shall establish such standards for the issuance, refusal, or revocation of licenses as it may deem necessary to assure adequate source materials for production, research, or development activities pursuant to this act or to prevent the use of such materials in a manner inconsistent with the national welfare. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish.

"(4) Reporting: The Commission is authorized to issue such regulations or orders requiring reports of ownership, possession, extraction, refining, shipment, or other handling of source materials as it may deem necessary, except that such reports shall not be required with respect to (A) any source material prior to removal from its place of deposit in nature, or (B) quantities of source materials which in the opinion of the Commission are unimportant or the reporting of which will discourage independent prospecting for new deposits.

"(5) Acquisition: The Commission is authorized and directed to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this act. Any purchase made under this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made thereunder. The Commission may establish guaranteed

prices for all source materials delivered to it within a specified time. Just compensation shall be made for any property taken, requisitioned, or condemned under this paragraph.

"(6) Exploration: The Commission is authorized to conduct and enter into contracts for the conduct of exploratory operations, investigations, and inspections to determine the location, extent, mode of occurrence, use, or conditions of deposits or supplies of source materials, making just compensation for any damage or injury occasioned thereby. Such exploratory operations may be conducted only with the consent of the owner, but such investigations and inspections may be conducted with or without such consent.

"(7) Public lands: All uranium, thorium, and all other materials determined pursuant to paragraph (1) of this subsection to be peculiarly essential to the production of fissionable material, contained, in whatever concentration, in deposits in the public lands are hereby reserved for the use of the United States; except that with respect to any location, entry, or settlement made prior to the date of enactment of this act no reservation shall be deemed to have been made, if such reservation would deprive any person of any existing or inchoate rights or privileges to which he would otherwise be entitled or would otherwise enjoy: *Provided, however*, That no person, corporation, partnership, or association, which had any part, directly or indirectly, in the development of the atomic bomb project, may benefit by any location, entry, or settlement upon the public domain made after such person, corporation, partnership, or association took part in such project. The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources, under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby. Any lands so patented, conveyed, leased, or otherwise disposed of may be used, and any rights under any such permit or authorization may be exercised, as if no reservation of such materials had been made under this subsection; except that when such use results in the extraction of any such material from the land in quantities which may not be transferred or delivered without a license under this subsection, such material shall be the property of the Commission and the Commission may require delivery of such material to it by any possessor thereof after such material has been separated as such from the ores in which it was contained. If the Commission requires the delivery of such material to it, it shall pay to the person mining or extracting the same, or to such other person as the Commission determines to be entitled thereto, such sums, including profits, as the Commission deems fair and reasonable for the discovery, mining, development, production, extraction, and other services performed with respect to such material prior to such delivery, but such payment shall not include any amount on account of the value of such material before removal from its place of deposit in nature. If the Commission does not require delivery of such material to it, the reservation made pursuant to this paragraph shall be of no further force or effect.

"(c) Byproduct materials:

"(1) Definition.—As used in this act, the term 'byproduct material' means any radioactive material (except fissionable material) yielded in or made radioactive by exposure to the radiation incident to the processes of producing or utilizing fissionable material."

Mr. THOMASON. Mr. Chairman, I ask unanimous consent that the further reading of the bill be dispensed with, with the understanding that any amendments may be offered at the appropriate places.

The CHAIRMAN. Is there objection to the request of the gentleman from Texas?

Mr. THOMAS of New Jersey. Mr. Chairman, reserving the right to object, how many amendments are there at the Clerk's desk?

The CHAIRMAN. There are 16 amendments.

Mr. THOMAS of New Jersey. How many committee amendment are there?

Mr. THOMASON. Three more.

The CHAIRMAN. There are three more.

Mr. THOMASON. Mr. Chairman, this is not an effort to deprive any one from offering an amendment at the appropriate place in the bill, but inasmuch as the Speaker is anxious to conclude the consideration of this bill on account of a very crowded calendar, we want to save time.

Mr. THOMAS of New Jersey. Will the gentleman tell us when he expects to have the Committee rise?

Mr. THOMASON. If I may quote the Chairman and also the Speaker, I think there is an understanding to rise at 5:30.

Mr. THOMAS of New Jersey. If the gentleman will agree to rise at 5:30, I will not object; otherwise I will have to object.

Mr. KEEFE. Mr. Chairman, reserving the right to object, this is an extremely important bill and should be read section by section so that the Members may understand it; therefore I object.

Mr. THOMAS of New Jersey. Mr. Chairman, I object.

The Clerk read as follows:

(2) Distribution: The Commission is authorized to distribute, with or without charge, byproduct materials to applicants seeking such materials for research or development activity, medical therapy, industrial uses, or such other useful applications as may be developed. In distributing such materials, the Commission shall give preference to applicants proposing to use such materials in the conduct of research and development activity or medical therapy. The Commission shall not distribute any byproduct materials to any applicant, and shall recall any distributed materials from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such materials in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(d) General provisions:

(1) The Commission shall not distribute (A) any fissionable or source material to any person for a use which is not under or within the jurisdiction of the United States or to any foreign government.

(2) The Commission shall establish by regulation a procedure by which any person who is dissatisfied with the distribution or refusal to distribute to him, or the recall from him, of any fissionable or byproduct materials or with the issuance, refusal, or revocation of a license to him for the transfer or receipt of source materials may obtain a review of such determination by a board of appeal consisting of three members appointed by the Commission. The Commission may in

its discretion review and revise any decision of such board of appeal.

With the following committee amendments:

Page 20, line 10, strike out "person" and insert "individual."

Page 10, line 14, strike out "person" and insert "individual."

Page 20, line 15, after the word "project", insert "unless first authorized so to do by the Commission."

Page 22, line 22, after the word "distribute" insert "(A)."

The committee amendments were agreed to.

The Clerk read as follows:

Committee amendment: Page 22, line 23, strike out the words "or source."

Mr. THOMASON. Mr. Chairman, I offer a substitute for the committee amendment on page 22, line 22.

The Clerk read as follows:

Substitute offered by Mr. THOMASON for the committee amendment:

Page 22, line 22, strike out all of paragraph (1) and insert in lieu thereof the following:

"(1) The Commission shall not—

"(A) Distribute any fissionable material to (i) any person for a use which is not under or within the jurisdiction of the United States, (ii) any foreign government, or (iii) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.

"(B) License any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security."

Page 18, beginning in line 1, strike out "and no person may receive possession of or title to" and insert in lieu thereof, "receive possession of or title to, or export from the United States."

Page 23, line 11, strike out "transfer or receipt" and insert in lieu thereof "transfer, delivery, receipt, or exportation."

The CHAIRMAN. The question is on the committee substitute.

The committee substitute was agreed to.

The CHAIRMAN. The question is on the committee amendment as amended by the substitute.

The committee amendment was agreed to.

Mr. THOMASON. Mr. Chairman, I offer a clarifying amendment.

The Clerk read as follows:

Amendment offered by Mr. THOMASON: Page 20, line 4, strike out the semicolon and all that follows down through the word "enjoy" in line 9, and insert in lieu thereof the words "subject to valid claims existing on the date of the enactment of this act."

Mr. CASE of South Dakota. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, if I understand the amendment correctly, it proposes on page 20 to strike out the language between line 4 and line 9 and to substitute merely language reading "subject to existing claims."

Mr. THOMASON. Mr. Chairman, if the gentleman will yield, I will say to the gentleman from South Dakota that the language reads "subject to valid claims existing on the date of the enactment

of this act." May I add that I do not pretend to be too familiar with the matter except the chairman of the committee, with the advice of counsel, tells me that the Department of the Interior sent this amendment over, with the assurance that it does not change the meaning or the import of the language in the bill but merely clarifies it to conform to existing law.

Mr. CASE of South Dakota. The language which is proposed to be stricken, as nearly as I can determine its meaning, seeks to make clear that valid claims are not violated or rights are not lost.

Mr. THOMASON. That is correct, and the substitute does the same thing.

Mr. CASE of South Dakota. The gentleman from Texas says it does the same thing?

Mr. THOMASON. That is what the chairman of the committee as well as counsel for the committee advise me, and that it was the request of the Department of the Interior.

Mr. CASE of South Dakota. While I am here, I would like to ask the gentleman from Texas also whether the committee proposes to do anything about the matter on the same page to which I drew attention yesterday? I pointed out yesterday that the language in the bill, which reads: "The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources," apparently would not apply similar requirements to lands in the national forest administered by the Secretary of Agriculture unless they went to patent.

Mr. THOMASON. My information is that it is subject to existing Executive orders which cover the subject, and therefore the committee would have no other amendment.

Mr. CASE of South Dakota. I should like to ask the gentleman then what would happen in a situation like this: Claims are filed in the national forests simply by the act of the individual who files the claim. He goes out with a hatchet and pencil and makes his location. Within a certain number of days he files that location notice, if he desires, in the county courthouse. But from the time that he has put up his notice there he may mine that particular claim if he does a certain amount of development each year, called assessment work.

Mr. THOMASON. My personal opinion is that if the substitute amendment offered by the committee is adopted, this is just about as plain as it could be made, because it is all subject to valid claims existing on the date of the act. Therefore, there could be no violence done to the existing claims.

Mr. CASE of South Dakota. I think that is probably correct, and certainly I am not objecting to that. I am trying to draw attention to another matter in the language that follows. I assume the purpose of the legislation from line 16 on is to make a specific reservation and have the Secretary of the Interior put it in any form of mineral permit he administers. I am wondering why you

do not do the same for lands under the Secretary of Agriculture.

I know, as a matter of fact, for example, that a permit system is in operation on certain lands in the National Forests in South Dakota which are what we call Federal game sanctuaries. Under that system, prospecting permits and mining permits are issued but they are issued by the Secretary of Agriculture and not by the Secretary of the Interior.

It is entirely immaterial to me. I am not seeking to tighten the bill in this respect, but in all fairness to the Committee I thought I should point out that there are mining permits which are administered by the Secretary of Agriculture and not by the Secretary of the Interior. If the Committee does not care to do anything about it, it is immaterial to me.

Mr. THOMASON. Existing claims are not affected in any way.

The CHAIRMAN. The question is on the committee amendment offered by the gentleman from Texas.

The committee amendment was agreed to.

Mr. ELSTON. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. ELSTON: On page 23, strike out subsection (2).

Mr. ELSTON. Mr. Chairman, the purpose of offering this amendment is to eliminate from the bill a rather strange form of procedure. This section you will notice touches on control of materials. The Commission under this section has the power and authority to distribute materials which may vitally affect the private industry of the Nation. The concluding paragraph of this section reads as follows:

The Commission shall establish by regulation a procedure by which any person who is dissatisfied with the distribution or refusal to distribute to him, or the recall from him, of any fissionable or byproduct materials, or with the issuance, refusal, or revocation of a license to him for the transfer or receipt of source materials may obtain a review of such determination by a board of appeal consisting of three members appointed by the Commission.

You will note that the Commission appoints its own board of appeal to pass on a question which may mean life or death to an industry, because if the time comes when fissionable material is used for industrial purposes it may make or break a company to be able to get it or not get it. The Commission makes an order on the use of fissionable material, and if a person is aggrieved by the order of the Commission, he may appeal, but he appeals to a board of appeal consisting of three members appointed by the Commission. If a person is not satisfied with the decision of the board of appeal, he does not appeal to the courts. The only recourse he has under this section is to do what is provided for in the last sentence of this section, which I read:

The Commission may in its discretion review and revise any decision of such board of appeal.

In other words, the Commission appoints the board of appeal in the first instance, and makes its own choice of membership. If the person or company

aggrieved is not satisfied with the decision of the board of appeal, which the Commission appoints, such person or company appeals back to the Commission itself. That is about the strangest appeal procedure of which I have ever heard. I submit that it should be eliminated from the bill, and the general provisions of the Administrative Code of Procedure, which we adopted some time ago in this House, should apply.

Under that code an appeal could be had to the courts of the land. That code was inserted in this bill by an amendment which I offered in committee, and it was made applicable to any decision of the Commission. But since this separate section remains here I believe it would be construed as a special section and as an exception to the general appeal provisions laid down in the administrative code of procedure if it is not stricken out. Therefore, I am offering an amendment to strike this special appeal section out of the bill.

Mrs. LUCE. Does that mean if the Atomic Commission should manage, as Mr. Lillenthal predicts it will, to generate heat and electrical energy for commercial use, since it has the power to license this and sell it to the public, if an industry was not satisfied with what it got, it could only appeal to this board?

Mr. ELSTON. This is not the section under which you appeal with reference to the issuance of a license. This is the section under which you would appeal from an order of the Commission allocating fissionable or byproducts material, which would be about the same thing because if you have a license and cannot get the material, the license would be meaningless.

Mr. THOMASON. Mr. Chairman, I think there is merit to the amendment offered by the gentleman from Ohio. I do think there ought to be some appeal from the acts of the Commission, but since I am led to believe that it would be covered by the Administrative Appeals Act it seems to me it is more or less unnecessary. In my judgment, it seems to be a rather awkward procedure.

Mr. VORYS of Ohio. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield.

Mr. VORYS of Ohio. As I understood the gentleman from Ohio, by striking out this very awkward attempt at providing an appeals section we therefore put this bill under the appeal provisions of the code of administrative procedure over which the Congress has labored for so many years.

Mr. THOMASON. I think the gentleman is correct.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield.

Mr. VOORHIS of California. Where would that leave the situation? I mean, where would that leave a person under the circumstances described by the gentleman from Ohio?

Mr. ELSTON. Mr. Chairman, if the gentleman from Texas will yield, may I say we not only depend on the code of administrative procedure, which we adopted some time ago in the House and which is now law, but to make certain that every kind of appeal that you might

take from an order of the Atomic Energy Commission could be taken, we wrote into this bill that the code of administrative procedure should apply. The amendment which I offered in committee appears on pages 45 and 46 of the bill. So, if the section which I am endeavoring to strike from the bill is stricken from the bill, it is my opinion that we are fully protected under the code of administrative procedure plus the committee amendment which appears on pages 45 and 46 of the bill.

Mr. THOMASON. May I say to the gentleman from California, if I recall correctly, the gentleman from Ohio had offered in committee an amendment putting this under the terms of the Administrative Procedure Act.

Mr. ELSTON. Yes; that is correct.

Mr. THOMASON. So it does seem to me that it is not only rather cumbersome but superfluous.

Mr. VOORHIS of California. What I was trying to get at was, What would be the practical effect on a person if he felt he had been unjustly treated?

Mr. THOMASON. My reply to that is, from my limited knowledge of the subject, that he could appeal to the Commission, and if he still felt aggrieved he would have the right of judicial review.

Mr. VORYS of Ohio. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield.

Mr. VORYS of Ohio. Such a person would hire a lawyer and proceed under the code of judicial procedure which we have set up.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Ohio [Mr. ELSTON].

The amendment was agreed to.

Mr. LANHAM. Mr. Chairman, I offer an amendment, which is at the Clerk's desk.

The Clerk read as follows:

Amendment offered by Mr. LANHAM: On page 15, line 24, after the word "material", insert "owned by it."

[Mr. LANHAM addressed the Committee. His remarks will appear hereafter in the Appendix.]

The CHAIRMAN. The question is on the amendment offered by the gentleman from Texas.

The question was taken; and the Chair being in doubt, the Committee divided; and there were—ayes 69, noes 39.

The motion was agreed to.

Mr. THOMASON. Mr. Chairman, I move that the Committee do now rise. The motion was agreed to.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr. JOHN J. DELANEY, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (S. 1717) for the development and control of atomic energy, had come to no resolution thereon.

~~FURTHER MESSAGE FROM THE SENATE~~

~~A further message from the Senate, by Mr. Gatling, its enrolling clerk, announced that the Senate agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the~~

6. TREASURY-POST OFFICE APPROPRIATION BILL. Both Houses agreed to a further conference report on this bill, H. R. 5452 (pp. 9571-2, 9621). This bill will now be sent to the President.
7. WOMEN'S RIGHTS. Rejected S. J. Res. 61, proposing an amendment to the Constitution providing for equal rights for men and women (vote was 38 for, 35 against, but 2/3 was required) (pp. 9527-35).
8. MINERALS. Senate conferees were appointed on S. 1236, to amend the Mineral Leasing Act in order to promote development of oil and gas on the public domain (p. 9549).
9. BANKING AND CURRENCY. Both Houses agreed to the conference report on H. R. 4590, to authorize the use by industry of Government silver (pp. 9550, 9604-5). This bill will now be sent to the President.
10. HAWAII. The Territories and Insular Affairs Committee reported without amendment H. R. 3361, to provide that U. S. use of lands in Hawaii for war purposes which may prevent the performance of any condition of sale, shall not cause forfeiture of the lands (S. Rept. 1762) (p. 9536).

HOUSE - July 19

11. LABOR-FEDERAL SECURITY APPROPRIATION BILL. Agreed to a further conference report on this bill, H. R. 6739, which modifies the NLRB item so as to prevent it from organizing or assisting in organizing of agricultural laborers as that term is defined in the Fair Labor Standards Act (pp. 9621-2).
12. UNESCO. Chairman Bloom of the Foreign Affairs Committee requested House concurrence in the Senate amendments to H. J. Res. 305, to provide for U. S. participation in the United Nations, Educational, Scientific, and Cultural Organization, but withdrew the request temporarily after discussion (p. 9622).
13. CONGRESSIONAL REORGANIZATION. Rep. Monroney, Okla., inserted and discussed the House report on the congressional-reorganization bill, S. 2177 (pp. 9623-35).
14. SUBSIDIES; TAXATION. Rep. Rogers, Mass., recommended reduction of taxes in the amount of discontinued subsidies, saying "the people should not pay twice" (p. 9636).
15. PRICE CONTROL. Rep. Bryson, S. C., spoke in favor of price-control continuation and expressed the hope that a satisfactory compromise will be worked out (pp. 9636-7).
16. CONTRACTS. The Judiciary Committee reported with amendments S. 1477, to authorize relief in certain cases where work, supplies, or services have been furnished for Government under contracts during the war (H. Rept. 2576) (p. 9638).
17. EDUCATION; LANDS. The Public Lands Committee reported with amendment H. R. 7038, to provide for sale of certain public lands in the States for the use and benefit of the State public educational institutions (H. Rept. 2580) (p. 9638).

18. PERSONNEL. Concurred in Senate amendment to H.R. 6432, to permit department and agency heads to designate disbursing officers to make payments of claims directly to Government employees and former employees for the difference between amounts of overtime, leave, and holiday compensation computed at day rates and overtime, leave, and holiday compensation computed at night rates pursuant to Comptroller General decisions (pp. 9576) This bill will now be sent to the President.
19. WATER POLLUTION. Rep. Pittenger, Minn., urged immediate action on legislation to control and prevent water pollution (pp. 9576-7).
20. RESEARCH; ATOMIC ENERGY. Continued debate on S. 1717, for the control and development of atomic energy (pp. 9591-621).
21. CREDIT UNIONS. Concurred in Senate amendment to H.R. 6372, to amend the Federal Credit Union Act so as to permit recovery within two years of charges for greater amounts of interest than are allowed under the Act; to provide for issuance of shares in joint tenancy; to authorize payments from union funds of premiums for bonds required; and to limit individual loans to \$200 or 10% of the paid-in and unimpaired capital and surplus of the credit union, or not in excess of \$300 unless the amount over \$300 is adequately secured (p. 9605). This bill will now be sent to the President.

HOUSE - July 20

22. FOREIGN RELATIONS. Passed as reported H.R. 6967, the proposed Foreign Service Act of 1946, to improve, strengthen, and expand the Foreign Service and to consolidate and revise the laws relating to its administration; includes provisions for cooperation with other departments (pp. 9699-717). For provisions of bill see Digest 134).
Conferees were appointed on H.J. Res. 305, to provide for U.S. participation in the United Nations Educational, Scientific, and Cultural Organization (p. 9724).
Passed as reported H.R. 6646, to establish the Office of Under Secretary of State for Economic Affairs (pp. 9721-3).
23. INFORMATION; FOREIGN RELATIONS. Passed with amendments H.R. 4982, to enable the State Department more effectively to carry out its responsibilities in the foreign field by means of (a) public dissemination abroad of information about the U.S., and (b) promotion of the interchange of persons, knowledge, and skills between the U.S. and the peoples of other countries (pp. 9717-21).
24. BUILDINGS AND GROUNDS. Rep. Lanham, Tex., made and withdrew a request to suspend the rules and pass H.R. 6917, to provide site acquisition and design of Federal buildings and to give FWA additional powers over the construction and operation of public buildings (p. 9726). Rep. Lanham had previously asked unanimous consent for the consideration of the bill, but Rep. Buck, N.Y., objected (pp. 9724-6).
25. REORGANIZATION. Rep. Manasco asked unanimous consent for the consideration of H.J. Res. 382, providing for the taking effect of Reorganization Plan No. 1, except for the provision regarding the National Housing Agency; but withdrew his request when Rep. Taber, N.Y., stated that he would have to object (p. 9726).
The Rules Committee reported a resolution for the consideration of S. 2177, the LaFollette congressional-reorganization bill (p. 9733).

vided, among other things, for the reduction of the rate of interest from 4 to 2½ percent. In the other body an amendment was inserted providing for the same reduction in the rate of interest on some three projects in Nebraska of similar nature and one project in South Carolina. The Public Works Agency has advised me that the amendment is agreeable, so has the Secretary of the Interior. I have taken the amendment up with the ranking minority member of the Committee on Flood Control, the gentleman from Massachusetts [Mr. CLASON], and it is agreeable to him.

Mr. MARTIN of Massachusetts. This simply equalizes the projects in Oklahoma, Nebraska, and South Carolina?

Mr. WHITTINGTON. Yes. It only covers these power projects and equalizes the rate of interest.

Mr. MILLER of Nebraska. What will be the interest rate?

Mr. WHITTINGTON. Two and a half percent as against four at the present time.

Mr. STEFAN. It was 5 percent, was it not?

Mr. WHITTINGTON. No. It is 4 percent at present, according to the Public Works Agency.

Mr. STEFAN. It could have been 5.

Mr. WHITTINGTON. This reduces it to 2½ percent.

Mr. RIVERS. This will save the power users of my State a considerable amount of money.

Mr. WHITTINGTON. Yes. It will reduce the rate of interest from 4 to 2½ percent on the loans on said projects in the three States mentioned.

Mr. RIVERS. Mr. Speaker, I ask unanimous consent to extend my remarks at this point in the RECORD.

The SPEAKER. Is there objection to the request of the gentleman from South Carolina?

There was no objection.

Mr. RIVERS. Mr. Speaker, I am convinced that the House should agree to pass the amendment submitted by Senator Johnston authorizing the Federal Works Administrator, or his successor, to reduce the interest rate from 4 percent to 2½ percent on all power bonds held by such agency issued by States, counties, municipalities and other subdivisions of State governments for power projects financed by the Public Works Administration.

In my own district, this would enable the South Carolina Public Service Authority which operates the great Santee-Cooper hydroelectric and navigation system, to pass on to the people of South Carolina a saving, in interest alone, exceeding \$600,000.

In my opinion, this will be a great thing, not only for the State of South Carolina but for the country as a whole.

Today, money can be borrowed from banks at a rate of interest as low as 2½ percent. It is eminently fitting that the Government should follow the lead of private enterprise. We are living in a day of inflationary values and money is easily accessible. It follows, therefore, that the Government should pass on to the people the advantages to be gained by a low rate of interest.

The SPEAKER. Is there objection to

the request of the gentleman from Mississippi?

There was no objection.

The Senate amendment was concurred in.

A motion to reconsider was laid on the table.

EXTENSION OF REMARKS

Mr. SHORT asked and was given permission to extend his remarks in the RECORD in two instances and include certain excerpts from magazines and newspapers.

Mr. STIGLER asked and was given permission to revise and extend his remarks on the bill H. R. 5508.

Mr. KNUTSON asked and was given permission to extend his remarks in the RECORD and include an editorial.

Mr. DAVIS asked and was given permission to extend his remarks in the RECORD and include an address.

Mr. SCHWABE of Oklahoma asked and was given permission to extend his remarks in the RECORD and include two letters.

Mr. ROCKWELL asked and was given permission to extend his remarks in the RECORD and include an item.

Mr. CARNAHAN asked and was given permission to extend his remarks in the RECORD and include an article by C. P. Turley from the July 11, 1946, issue of the Current Local, Van Buren, Mo.

Mr. BUNKER asked and was given permission to extend his remarks in the RECORD and include an article on mining.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. MAY. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill (S. 1717) for the development and control of atomic energy.

CALL OF THE HOUSE

Mr. THOMAS of New Jersey. Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER. Evidently a quorum is not present. Without objection a call of the House is ordered.

There was no objection.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 227]

Allen, Ill.	Gillespie	Monroney
Allen, La.	Gossett	Norton
Anderson, Calif.	Granger	O'Toole
Andrews, N. Y.	Gross	Patrick
Arnold	Hart	Peterson, Ga.
Baldwin, Md.	Hébert	Pfeifer
Bates, Ky.	Hollifield	Powell
Beckworth	Holmes, Wash.	Priest
Boren	Hook	Reece, Tenn.
Boykin	Izac	Robinson, Utah
Buffett	Jennings	Roe, Md.
Cannon, Fla.	Johnson, Okla.	Roe, N. Y.
Cochran	Johnson, Tex.	Slaughter
Coffee	Keogh	Sparkman
Cole, Kans.	Kerr	Stewart
Combs	Kilday	Talbot
Cooper	LaFollette	Tarver
Courtney	Ludlow	Tolan
Cox	McGehee	Torrens
Cravens	McMillan, S. C.	Vinson
Crawford	Mahon	Welch
Curley	Mankin	West
Daughton, Va.	Mansfield	Wickersham
De Lacy	Mont	Wigglesworth
Earthman	Mansfield, Tex.	Wolfenden, Pa.
Engel, Mich.	Mason	Wood
Gibson	Miller, Calif.	

The SPEAKER. On this roll call 352 Members have answered to their names, a quorum.

By unanimous consent, further proceedings under the call were dispensed with.

ATOMIC ENERGY ACT OF 1946

The SPEAKER. The question is on the motion of the gentleman from Kentucky.

The motion was agreed to.

Accordingly the House resolved itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill (S. 1717) for the development and control of atomic energy, with Mr. JOHN J. DELANEY in the chair.

The Clerk read the title of the bill.

Mr. MAY. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. MAY. Mr. Chairman, I understand the reading of the bill was completed to and including all of section 5. May I inquire whether the committee amendments were agreed to?

The CHAIRMAN. The reading was completed down to page 23, line 15. The Chair may say for the information of the gentleman that all committee amendments were adopted.

Mr. HINSHAW. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I take the floor at this time to propound an inquiry or two of the committee in connection with the prohibition on page 15, line 15. It is stated there:

It shall be unlawful for any person after 60 days from the effective date of this act to * * * (c) directly or indirectly engage in the production of any fissionable material outside of the United States.

How are you going to prevent any one from producing such material outside the United States? I would like to ask that question of the committee.

Mr. MAY. I would like to answer the gentleman by saying that is a Senate provision that was in the bill when we received it, and the committee merely left it in the bill.

Mr. HINSHAW. That is not an answer. How in the world can you prevent anybody from manufacturing or engaging in the production of any fissionable material outside of the United States?

Mr. MAY. I will answer the gentleman directly by saying this Government has no jurisdiction outside of its own territory except in its possessions, and they are outside of the United States. That provision was likely put in there to enable this Commission to control the production of these materials and the handling of them in our territories. There is Alaska, for instance.

Mr. HINSHAW. That is not outside of the territorial definition of the United States as set forth on page 43 of the bill.

Mr. CASE of South Dakota. As a matter of fact, the gentleman has put his finger on the futility of the whole bill. That is the assumption of placing the production of fissionable material in the United States under control and the use of that under control. That will have no effect on what happens outside of the

United States. I think that this shows the futility of this bill until some international agreement is arrived at.

Mr. HINSHAW. Now let us refer to page 16, line 25, where it is stated:

The Commission is authorized to purchase or otherwise acquire any fissionable material or any interest therein outside the United States, or any interest in facilities for the production of fissionable material, or in real property on which such facilities are located.

And so forth. The last sentence of that subsection reads:

The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

I would like to know how the Commission can condemn an interest in any property outside the United States?

Mr. MAY. This merely provides that it may purchase.

Mr. HINSHAW. It provides for condemnation.

Mr. MAY. Where is the gentleman reading?

Mr. HINSHAW. The word "condemn" appears in line 11, page 17.

Mr. MAY. Line 11, page 17:

The Commission is authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

Mr. HINSHAW. I would like to know how you can do that outside the United States, and I merely asked for this time in order to call the attention of the membership to some of these things. I do not care whether the Senate put them in or who put them in.

Mr. MAY. I did not say that. I said it was the Senate that put it in, and it probably relates to the materials that they acquire in the United States.

Mr. HINSHAW. Mr. Chairman, I would like to reiterate that the answers of the committee on a great many questions that have been asked here have necessarily been probabilities rather than facts, because I do not believe that either the committee or this House understands the import of this bill.

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield to the gentleman from Missouri.

Mr. SHORT. Of course, we all know that there are many things going on at this hour in foreign lands that none of us know anything about because of the strict censorship that other countries have.

The CHAIRMAN. The time of the gentleman from California has expired.

(Mr. HINSHAW asked and was given permission to revise and extend his remarks.)

The CHAIRMAN. The Clerk will read. The Clerk read as follows:

MILITARY APPLICATIONS OF ATOMIC ENERGY

Sec. 6. (a) Authority: The Commission is authorized to—

(1) conduct experiments and do research and development work in the military application of atomic energy; and

(2) engage in the production of atomic bombs, atomic-bomb parts, or other military weapons utilizing fissionable materials;

except that such activities shall be carried on only to the extent that the express consent and direction of the President of the United States has been obtained, which consent and direction shall be obtained at least once each year.

The President from time to time may direct the Commission to deliver such quantities of weapons to the armed forces for such use as he deems necessary in the interest of national defense.

(b) Prohibition: It shall be unlawful for any person to manufacture, produce, transfer, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon, except as may be authorized by the Commission. Nothing in this subsection shall be deemed to modify the provisions of section 4 of this act, or to prohibit research activities in respect of military weapons, or to permit the export of any such equipment or device.

With the following committee amendments:

Page 24, line 6, after the word "of," insert "fissionable materials or."

Page 24, line 8; after the word "defense", insert "or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon."

The committee amendments were agreed to.

Mr. HINSHAW. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, here is another provision in the bill which is an anomaly. The committee amendment on page 24, line 8, reads:

to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon.

If you will then turn to page 28, line 20, you will find this language:

The President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in the following property:

(1) All fissionable materials; all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable material or atomic energy—

I would like to know how you can in one place authorize or direct the Commission to deliver quantities of fissionable material, and then authorize the armed forces to manufacture, produce or acquire equipment, when in section 9 you say that the President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in all of this property.

Can anybody on the committee answer that question?

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield to the gentleman from New Jersey.

Mr. THOMAS of New Jersey. The gentleman knows that I am opposed to this bill, and I shall vote to recommit the bill.

Mr. HINSHAW. I assume that is the case from the gentleman's previous remarks.

Mr. THOMAS of New Jersey. So my answer may not be a complete answer to the gentleman's question, but all the way through in the deliberations of the committee the committee members asked questions about the bill, just as we are

asking questions today, and the more questions you ask the more confused you are going to be and the more confused this House is going to be, so therefore that is one of the main reasons I am going to vote against this particular bill.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield to the gentleman from Kentucky, the Chairman, if he has an answer to the question.

Mr. MAY. Yes; I will answer it for the gentleman. Under section 9 of the bill, which requires the turning over of property to the Commission, which becomes effective on the date of enactment and approval of the bill. As to the provision in line 8 down to and including line 11 on page 24, it becomes effective thereafter and provides that the Commission may authorize the armed forces to manufacture atomic weapons as they see fit.

Mr. HINSHAW. No. It says that the President may direct the Commission to authorize, and on page 28 it says that the President shall direct the transfer of all interests owned by the United States, in any material and any machinery and any weapons, to the Commission. Those two sections are not compatible, if I can read the English language.

Mr. MAY. The gentleman is not opposed to a provision in the bill which would authorize the Commission to give the armed forces the right to manufacture atomic weapons after the Commission takes over the property, Oak Ridge, for instance? If they want to manufacture them, does not the gentleman think the Commission ought to let them do it?

Mr. HINSHAW. As I say, section 9 directs the President to transfer, and then the bill states at other places that when so transferred this property comes under the full and complete ownership of the Commission. The proposed committee amendment then states that the President may direct the Commission to authorize the armed forces to manufacture them. How can they do that if they cannot own any of the equipment? I should like to know that.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield to the gentleman from Ohio.

Mr. ELSTON. May I tell the gentleman how this particular committee amendment happened to be adopted? In reading this bill, some of us made the point that everything was transferred to the Commission. The Army and the Navy would not even have the right to manufacture atomic weapons of any kind except with the consent of the Commission. We felt that the manufacture of atomic weapons or any other kind of weapons is a function of the War and Navy Departments which should not be interfered with by any civilian commission. We were insisting that the services be given the right to go ahead with the manufacture of weapons without any order or license from the Commission. The committee amendment, which was offered I believe by the gentleman from Texas [Mr. KILDAY], was simply a compromise, and in my judgment is just about as confusing as about

everything else in this bill, which is another reason why the bill should be re-committed for further study.

Mr. HINSHAW. If you put in the bill this amendment on page 24, on page 28 in some location you will have to put in a proviso that will exempt that material and those facilities that are transferred back to the War Department for the manufacture of this material from the direction that the bill contains, which is that the President shall direct the transfer.

Mr. DOYLE. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield to the gentleman from California.

Mr. DOYLE. Answering the gentleman's question, there is nothing inconsistent between this language and the language in lines 20 and 21 in section 9, because the language in line 5 of page 24, to which the gentleman refers, states that the President from time to time may direct the Commission. That language does not compel the President of the United States to authorize the armed forces to manufacture, it merely makes it optional. So this amendment, subdivision (2), on which we are now voting, is subject to an option expressly given in line 5. It is optional with the President of the United States after he gets control under section 9 as to whether or not he desires to authorize the armed forces.

The CHAIRMAN. The time of the gentleman from California has expired.

Mr. HINSHAW. Mr. Chairman, I ask unanimous consent to proceed for three additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from California?

There was no objection.

Mr. HINSHAW. I appreciate the gentleman's remarks, but elsewhere in the bill it states quite clearly that when these transfers are once made to the Commission the Commission is vested with all right, title, and interest to, in full and complete ownership of, all of this material and facilities and all of the atomic weapons. In section 9 not only do you direct the transfer to the Commission of all of the material, the facilities, and the equipment, but the Commission will then have the full and complete ownership of all the bombs that have heretofore been manufactured and the military will have nothing to say about it.

Mr. MAY. That is the purpose of this amendment, to make it possible for the military department to manufacture them.

Mr. HINSHAW. I again suggest that if we are going to do that we had better amend section 9 in such a way as to permit the transfer of the bombs back to that department.

Mr. MAY. We are not through that section yet.

Mr. DONDERO. Mr. Chairman, will the gentleman yield for a question?

Mr. HINSHAW. I yield.

Mr. DONDERO. In reading the hearings I can find no reference to the Federal Bureau of Investigation. Can anybody tell why?

Mr. HINSHAW. That is a little bit off this subject.

Mr. DONDERO. It has application to this bill.

Mr. HINSHAW. I know that, but I would rather that the gentleman talk on that subject on his own time.

Mr. CLASON. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield to the gentleman from Massachusetts.

Mr. CLASON. Yesterday I pointed out in connection with an amendment which I offered, which is on page 9510 of the CONGRESSIONAL RECORD, that the Army and Navy are today spending millions of dollars on a program which permits them to carry on research and discovery in the field of atomic energy. Apparently my amendment was offered for the same purpose as the one offered by the committee except, I believe, the committee amendment is much more restricted in scope.

Mr. HINSHAW. Section 8, dealing with international arrangements, makes it mandatory upon the Commission as soon as an international arrangement is entered into to transfer to the international authority all of this material and facilities and bombs and everything else that the international authority may want. I would like to know how after that happens you are going to be able to authorize the armed forces to manufacture anything. You are not going to be able to do it. There is no sense having that amendment in the bill at all because the international authority will control the entire program from stem to stern and you will have located in the United States and elsewhere in the world international extraterritorial localities, if you want to call them that, where this manufacturing and so forth is to be carried on. That is a very serious question. I think it deserves the serious consideration of the Committee.

The CHAIRMAN. The time of the gentleman has expired.

Mr. VOORHIS of California. Mr. Chairman, I rise in opposition to the proposed amendment.

Mr. Chairman, I would agree with those Members who have indicated that the bill would be confusing if the committee amendment were added to it. I think I understand quite clearly what the bill would mean if the committee amendment were not adopted. I would like to read this language as the Senate wrote it:

The President may from time to time direct the Commission to deliver such quantities of weapons to the armed forces for such use as he deems necessary in the interests of national defense.

The principle of the bill as it came to us from the Senate was briefly that atomic-energy development was to be concentrated in the hands of the Commission. It was assumed that this Commission would be composed of the very best and most patriotic people in the whole Nation. It was assumed that they would handle this most dangerous and important problem and material that has ever faced this country with the degree of care and concern for the interests of this Nation that it demands. Anticipating, perhaps, what the gentleman from Michigan may have had in mind when he arose and mentioned the Fed-

eral Bureau of Investigation, may I say to him that so far as I am concerned I should be perfectly glad to support provisions in this bill providing for FBI investigation of persons who shall have any part in this work. It seems to me, however, what this proposed committee amendment which we are now considering will actually do, briefly, is this: The bill as originally brought to us provides unquestionably for the power of the President to decide how many atomic bombs shall be manufactured, at what time they shall be manufactured, whether or not they shall be manufactured, and to tell this Commission through its Division of Military Application to make that number of bombs and deliver them to the armed forces.

Obviously, the bombs are going to have to be made by scientists if they are made at all. They will be made in the Division of Military Application, under the terms of the original bill. The committee amendment will only mean, if I understand its meaning at all, that we will set up two places for the making of atomic bombs. On the one hand, they will be manufactured by the Division of Military Application of the Commission, and, on the other hand, if the President happens to decide to do it, the armed forces, the Army or the Navy, or both, may themselves set up new Oak Ridges or new something else and make them there.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. Let me yield to my colleague from California because he has asked me three times.

Mr. JOHNSON of California. I think subdivision 2 on page 24 means that the Army and Navy shall have the right to requisition the property of the Commission and make various kinds of atomic weapons. That is all it means. The property to make weapons and the machinery belongs to the commission, and the armed forces can requisition those and make them in an arsenal or any other place. In other words, there are two places you can make them under this provision, as the gentleman said.

Mr. VOORHIS of California. That is what it seems to me, but it does not seem to me that that is the wise and orderly way to go about the matter.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield. Mr. MAY. I think the gentleman has overlooked one important feature of the discussion here. Beginning in line 5 on page 24, it says:

The President from time to time may direct the Commission (1) to deliver such quantities of materials or weapons to the armed forces for such use as he deems necessary in the interest of national defense, or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material.

What is wrong with the Commission's determining whether they will do it or the armed forces do it?

Mr. VOORHIS of California. Of course, this would provide, as the gentleman suggests, that it might be done by the Division of Military Application of the Commission or it might be done else-

where. It seems to me this work ought to be concentrated in one organization.

The CHAIRMAN. The time of the gentleman from California [Mr. VOORHIS] has expired.

Mr. KOPPLEMANN. Mr. Chairman, I ask unanimous consent that the gentleman may proceed for five additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Connecticut?

There was no objection.

Mr. KOPPLEMANN. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield.

Mr. KOPPLEMANN. I am troubled by this committee amendment, because in placing in the hands of the War Department the power to manufacture bombs, it must, of course, be given over to private industry, and it cannot be given to small industry, it must be given to large industry. I fear the control of those, due to the fact that it might be that those large industries would make deals and cartels with other countries that would be detrimental to the safety of our own country. I would like to have the gentleman's opinion on that.

Mr. VOORHIS of California. My opinion of that is that so long as this process of manufacture is handled under the terms of the bill as written, I do not have the fear that what the gentleman postulates will happen. I believe it might well be that the Commission or the armed forces might want to contract for some of this production. I think that might well happen. I would not object to that being done. The thing I am fearful of—and I do not want to speak about it now because I have no doubt there will be full discussion of it later—but I am fearful that if we permit the private patenting of atomic energy, the thing the gentleman mentioned will happen. But I do not think it is involved in this particular question.

Mr. BROOKS. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield to the gentleman from Louisiana.

Mr. BROOKS. Further in reference to the subject discussed by the gentleman from California [Mr. JOHNSON] who preceded you, regarding the apparent conflict in two sections of the act, I want to say this:

The section to which he referred on page 24 deals entirely with the material application of atomic energy whereas the subsequent section which he felt conflicted with the military application section deals entirely with the ownership of the property of the Commission. To hold that that particular phrase to which the gentleman refers conflicts with the section on the property of the Commission would in effect hold that the entire section dealing with military application conflicts with the section on ownership of the property by the Commission. That is not an argument that is tenable, because they do not conflict. They are separate and stand on their own feet.

Mr. VOORHIS of California. I am much obliged to the gentleman.

In conclusion may I say that the Chief of Staff of the Army and the Secretaries of War and the Navy have expressed

their satisfaction with this bill from the point of view of its guarding the military interests of this Nation.

The most important thing that the bill will do will be to assure the continued development of the military applications. That is the thing that really counts much more than the manufacture of bombs; that is the vital thing. I am for continuing that military development under present circumstances; and until an international agreement and control that we have talked about so much is finally effected.

I believe all decisions with regard to what is going to be done under this bill should be made at the very highest level in our Government, that is, the President of the United States. I think that is where they should all be made. This legislation is written from the point of view of trying to make this thing a unified proposition so that the American program with regard to it will be so well coordinated as to make possible effective hope at least of getting the international control upon which the future hope of peace really rests. These are the reasons it would seem to me reasonable to leave the bill as it was before and why the committee amendment should be defeated.

The CHAIRMAN. The time of the gentleman from California has again expired.

Mr. MAY. Mr. Chairman, I ask for a vote on the committee amendment.

The CHAIRMAN. The question is on the committee amendment.

The question was taken; and on a division (demanded by Mr. THOMASON) there were—ayes 63, noes 38.

Mr. THOMASON. Mr. Chairman, I demand tellers.

Tellers were ordered, and the Chair appointed as tellers Mr. MAY and Mr. SHORT.

The committee divided; and the tellers were unable to agree on the count.

The CHAIRMAN. Without objection, the Chair will direct that the vote by tellers be taken over.

There was no objection.

The Chair appointed as tellers Mr. THOMASON and Mr. SHORT.

The Committee again divided, and the tellers reported that there were—ayes 102, noes 72.

So the amendment was agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Committee amendment: On page 24, line 13, after the comma insert "except as provided in section 6 (a)."

The committee amendment was agreed to.

The Clerk read as follows:

UTILIZATION OF ATOMIC ENERGY

SEC. 7. (a) License required: It shall be unlawful, except as provided in sections 5 (a) (4) (A) or (B) or 6 (a), for any person to manufacture, produce, or export any equipment or device utilizing fissionable material or atomic energy or to utilize fissionable material or atomic energy with or without such equipment or device, except under and in accordance with a license issued by the Commission authorizing such manufacture, production, export, or utilization. No license may permit any such activity if fissionable material is produced incident to

such activity, except as provided in sections 3 and 4. Nothing in this section shall be deemed to require a license for the conduct of research or development activities relating to the manufacture of such equipment or devices or the utilization of fissionable material or atomic energy, or for the manufacture or use of equipment or devices for medical therapy.

(b) Report to Congress: Whenever in its opinion any industrial, commercial, or other nonmilitary use of fissionable material or atomic energy has been sufficiently developed to be of practical value, the Commission shall prepare a report to the President stating all the facts with respect to such use, the Commission's estimate of the social, political, economic, and international effects of such use and the Commission's recommendations for necessary or desirable supplemental legislation. The President shall then transmit this report to the Congress together with his recommendations. No license for any manufacture, production, export, or use shall be issued by the Commission under this section until after (1) a report with respect to such manufacture, production, export, or use has been filed with the Congress; and (2) a period of 90 days in which the Congress was in session has elapsed after the report has been so filed. In computing such period of 90 days, there shall be excluded the days on which either House is not in session because of an adjournment of more than 3 days.

(c) Issuance of licenses: After such 90-day period, unless hereafter prohibited by law, the Commission may license such manufacture, production, export, or use in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this act. The Commission is authorized and directed to issue licenses on a nonexclusive basis and to supply to the extent available appropriate quantities of fissionable material to licensees: (1) whose proposed activities will serve some useful purpose proportionate to the quantities of fissionable material to be consumed; (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish; and (3) who agree to make available to the Commission such technical information and data concerning their activities pursuant to such licenses as the Commission may determine necessary to encourage similar activities by as many licensees as possible. Each such license shall be issued for a specified period, not to exceed 1 year, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon the expiration of such period. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results. No license may be given to any person for activities which are not under or within the jurisdiction of the United States to any foreign government.

(d) Byproduct power: If energy which may be utilized is produced in the production of fissionable material, such energy may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities under contracts providing for reasonable resale prices.

With the following committee amendments:

Page 27, line 3, strike out "to exceed" and insert "less than."

Page 27, line 19, strike out "States or" and insert "States."

The committee amendments were agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Committee amendment: Page 27, line 20, after the comma insert "or to persons within the jurisdiction of the United States where the issuance thereof would be inimical to the common defense and security."

Mr. MAY. Mr. Chairman, I offer a substitute for the committee amendment.

The Clerk read as follows:

Amendment offered by Mr. MAY as a substitute for the committee amendment: On page 27, line 20, before the period insert the following: "or to any person within the United States if in the opinion of the Commission the issuance of a license to such person would be inimical to the common defense and security."

The substitute for the committee amendment was agreed to.

The committee amendment as amended was agreed to.

Mr. CLASON. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I merely wish to point out that the last amendment over which we had a dispute and which was approved by our votes put into the bill an amendment which in effect I offered yesterday and which was rejected. I believe it is important because it will give to the armed forces through an order of the President an opportunity to carry on the very important research and development work they are now carrying on prior to the passage of this bill.

Another proposition which indicates to me how confused we are in connection with legislation today is the situation with reference to our postal employees. They are without their pay because we cannot figure out what the price of silver should be. This bill here gets all balled up because of a lot of little mix-ups between the Department of the Interior, the military departments, and all the other departments of the Government. I sincerely hope that during the course of the day not only will this committee straighten out this bill but the Committee on Appropriations will be able to bring in here a bill which will permit our postal employees to get their pay. The postal employees should not be penalized by the dispute over the price of silver now raging in the Treasury Department. They need their pay for their families, for their food, and for their vacations. In this case the Treasury Department is balling up the orderly processes of the Post Office Department.

Mr. KEEFE. Mr. Chairman, I rise in opposition to the pro forma amendment.

Mr. Chairman, I note in this section subparagraph (d), entitled "Byproduct Power." It reads:

If energy which may be utilized is produced in the production of fissionable material, such energy may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities

under contracts providing for reasonable resale prices.

Now, I have been trying to find out what that means. Is there anybody on this committee who can tell us what that means?

Mr. HARNESS of Indiana. If the gentleman would yield, I would like to answer the question.

Mr. KEEFE. I will yield to the gentleman in just a moment.

I get a little inkling as to what it means by reading the preface contained in the Report on the International Control of Atomic Energy prepared for the committee of the Secretary of State which I have before me. To show you how simple and easy this situation is, let me read it to you:

It is impossible to maintain a chain reaction in a mass of ordinary uranium. The neutrons which result from the fission of uranium 235 are captured by the much more abundant uranium 238 before they can get to another uranium 235 nucleus and the chain is therefore broken. However, by an adroit arrangement of ordinary uranium in the form of a lattice, imbedded in an inert material with respect to neutron capture like carbon, the neutrons can be slowed down and preferentially captured by uranium 235 to maintain the chain reaction.

Now, here is what happens:

In this way ordinary uranium can be used to maintain a chain reaction. A device of this sort is called a pile or a nuclear reactor. Since a large fraction of the neutrons in the reactor are captured by uranium 238, plutonium is a byproduct of the operation of the reactor. Another byproduct is the enormous amount of heat energy released by the fission process. A third byproduct is a large variety of highly radioactive materials which are the fission fragments or the result of neutron capture by materials inserted in the reactor.

Now we have indicated here in this section that the so-called byproduct powers that I have just described may be used by the Commission and transferred to other Government agencies or sold to public or private utilities under contracts providing for a reasonable retail price. Just so that the public and the Congress will know and understand when this bill passes and becomes operative and your constituents should certainly understand that they will perhaps have an opportunity to buy as byproducts from this Commission highly radioactive materials which are fission fragments as the result of neutrons captured by materials inserted in the reactor, it demonstrates to me so far as I am concerned, and I think most of the Members of this House are concerned, that we are going over this legislation without any very clear comprehension as to just exactly what may be involved. I conceive that possibly in this process there may be the development of heat as another byproduct. There may be developed electricity as another byproduct. I call it to the attention of the Congress in order that we may know and may have in the RECORD a very clear and definite understanding as to what we are legislating on today.

I now yield to the gentleman from Indiana [Mr. HARNESS].

Mr. HARNESS of Indiana. A few moments ago I wanted to make an observation that that was only one of the

many reasons why this legislation should go back to the committee.

Mr. KEEFE. Well, that may be a compelling reason.

The CHAIRMAN. The time of the gentleman from Wisconsin has expired.

Mr. MAY. Mr. Chairman, I move that all debate on this section and all amendments thereto close in 5 minutes.

The motion was agreed to.

Mr. VOORHIS of California. Mr. Chairman, the gentleman from Wisconsin [Mr. KEEFE] has raised an important question on which I think I can at least say one thing that will be of interest.

At the atomic-energy plant in the State of Washington there is at the present time a considerable amount of this byproduct energy, that the gentleman described when he read the report, that is being produced and wasted into the Columbia River. The fact of the matter is that the temperature of that great stream is being considerably raised. There exists the possibility that that byproduct energy might indeed be sold to some public body or some private agency for some useful purpose, on condition that since it is generated with public funds it should be resold at a fair price. That happens to be a problem right now and for want of legislation like this a great waste is going on. I take it that is why it is in the bill.

Mr. KEEFE. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield.

Mr. KEEFE. Does the gentleman understand that in this process there might be electricity developed as a byproduct of the process?

Mr. VOORHIS of California. I understand, as fully as one man's completely inadequate mind can understand it, that there are those possibilities with regard to this matter. My main concern, as far as the domestic application of peacetime uses is concerned, is that they shall be under such circumstances as to spread the benefits as broadly as possible throughout the Nation, and to give all elements in the population and all elements in business, as nearly as possible, an equal chance.

The CHAIRMAN. The time of the gentleman from California [Mr. Voorhis] has expired.

Mr. MURDOCK. Mr. Chairman, I regard paragraph (d) of the bill, as found on pages 27-28, a wise provision. Whoever wrote this bill, S. 1717, must have become very well acquainted with the processes thus far used in placing in human hands atomic power. I understand that there are several exceedingly valuable byproducts in the manufacture of atomic bombs. We have heard suggested that we probably have only slight conception of the great value for medicine of radioactive material.

Probably in the field of power, or in heat, there is likewise a tremendous byproduct of the process. If electric power can be produced as a byproduct in the manufacture of fissionable material, which in itself also has great peacetime utility and value, it is easily conceivable that great quantities of heat or electricity can be produced very cheaply. If such is the case, whoever has control of the processes should see to it that society gets

the benefit, through lowered rates. Society has already paid a great financial price and ought to enjoy financial benefits.

The Clerk read as follows:

INTERNATIONAL ARRANGEMENTS

SEC. 8. (a) Definition: As used in this act, the term "international arrangement" shall mean any treaty approved by the Senate or international agreement approved by the Congress, during the time such treaty or agreement is in full force and effect.

(b) Effect of international arrangements: Any provision of this act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this act shall be deemed to be of no further force or effect.

(c) Policies contained in international arrangements: In the performance of its functions under this act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

With the following committee amendment:

On page 28, line 7, after the word "agreement", insert the word "hereafter."

Mr. HINSHAW. Mr. Chairman, I ask for recognition on the amendment.

Mr. Chairman, I would like to inquire of the chairman of the committee why it was that they limited the international agreements to those which might "hereafter" be approved by Congress. Are there some agreements that have already been approved that require the insertion of this word "hereafter"?

Mr. MAY. The intention was to be all-inclusive, so that it would include not only those that have already been approved but any that may hereafter be approved.

Mr. HINSHAW. No. I believe the gentleman is mistaken. By the insertion of this word "hereafter," you are approving all of those treaties that have been heretofore as well as those hereafter approved by the Senate, but you are limiting the international agreements approved by Congress to only those which are hereafter approved. I wonder if there has been some agreement that has been heretofore approved in this connection that I do not know about.

Mr. MAY. There is none that I know of. It is simply to take care of any that might be made.

Mr. HINSHAW. I would like to call attention to the fact that this section 8 remaining in the bill is an authorization, in advance of any treaty that might be made, to carry out the provisions of any such treaty and give maximum effect to any policies contained in such arrangement. In other words, that would almost constitute a blank check to the Commission in connection with any arrangement of international character that might hereafter be made. You should understand in giving this your approval that it can be a treaty approved by two-thirds of the Senate, without regard to the House of Representatives, in which case, of course, the House would not have anything further to say on this subject. Or it can be an international agreement approved by both bodies and I assume a majority vote in both bodies.

This section 8 is the kernel of the nut in this bill. It is the section which provides that all properties, materials, real estate, and everything else in the United States under the jurisdiction of the United States Atomic Energy Commission may be transferred to the international authority upon the conclusion of the international agreement.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. HINSHAW. I yield.

Mr. JOHNSON of California. Is not that the rule that pertains now, that a treaty is the supreme law of the land and it modifies all laws that may conflict with it?

Mr. HINSHAW. There is no treaty that I know of that would authorize the turning over to an international authority of real property of the United States within the United States boundaries.

Mr. JOHNSON of California. How does the gentleman know they are going to have one like that? The gentleman is just assuming that.

Mr. HINSHAW. I am assuming that after this bill becomes law with that language in it and you should want to strike that out of section 8, it would be subject to a veto and it would take a two-thirds vote in both Houses to override the veto.

Mr. JOHNSON of California. What the gentleman is talking about is the rule now in the case of international agreements. This does not change any rules.

Mr. HINSHAW. This authorizes in advance something that is not already done.

The CHAIRMAN. The time of the gentleman from California has expired.

The question is on the amendment.

The amendment was agreed.

The Clerk read as follows:

Page 28, line 19:

PROPERTY OF THE COMMISSION

SEC. 9. (a) The President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in the following property:

(1) All fissionable material; all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable material or atomic energy; all processes and technical information of any kind, and the source thereof (including data, drawings, specifications, patents, patent applications, and other sources) relating to the processing, production, or utilization of fissionable material or atomic energy; and all contracts, agreements, leases, patents, applications for patents, inventions and discoveries (whether patented or unpatented), and other rights of any kind concerning any such items;

(2) All facilities, equipment, and materials, devoted primarily to atomic energy research and development; and

(3) Such other property owned by or in the custody or control of the Manhattan Engineer District or other Government agencies as the President may determine.

(b) In order to render financial assistance to those States and localities in which the activities of the Commission are carried on and in which the Commission has acquired property previously subject to State and local taxation, the Commission is authorized to make payments to State and local governments in lieu of property taxes. Such payments may be in the amounts, at the times, and upon the terms the Commission deems appropriate, but the Commission shall be

guided by the policy of not making payments in excess of the taxes which would have been payable for such property in the condition in which it was acquired, except in cases where special burdens have been cast upon the State or local government by activities of the Commission, the Manhattan engineer district or their agents. In any such case, any benefit accruing to the State or local government by reason of such activities shall be considered in determining the amount of the payment. The Commission, and the property, activities, and income of the Commission, are hereby expressly exempted from taxation in any manner or form by any State, county, municipality, or any subdivision thereof.

Mrs. LUCE. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, there is hardly an hour, certainly not a day, that I do not learn some new and frightening fact concerning atomic energy.

The gentleman from Wisconsin pointed out to you that the Lilienthal or State Department report indicated that it would only be a question of time before atomic energy installations could be used to generate heat and electrical power. As a matter of fact the report goes on to say that these installations may be put into operation in the very near future, and, I quote, "only the gradual incorporation and adaptation of such units to the specific demands of contemporary economy will involve a protracted development." This translated into plain English means that the only thing the Commission formed under the bill will need to determine is how long it will take Government monopoly heat and electricity to put private heat and electricity out of business, without unduly upsetting the folks.

But now here is an amusing idea which occurred to me as a result of a conversation that I had in the lobby with my great good friend, Dr. Judd, the gentleman from Minnesota, who is certainly a scientific expert in the field of radioactive materials. He told me—and I do not know whether he is on the floor, but if he is I hope he will correct the remark if I got it wrong—that he said in his speech on the floor of the House yesterday, which I have not yet had the time to study, that radioactive energy, used on human germ cells, may be used to mute the species, and that it was radioactive energy which was probably responsible, at history's dawn, for such sports and biological monsters as dinosaurs, and, was itself the mysterious instrument God used to create the creature, man. In those days only God knew how to mutate animal species. The secret may now be man's.

Now, evidently the gentleman from Minnesota, Dr. Judd, suggests radioactive energy may eventually be used to breed a new species: a superman godlike creature, or perhaps a monster; at any rate, operating on the germ cells it could be used to bring forth out of man as we know him now an indeterminate quantity of legs, arms, ears and eyes, if a careless user of this should feel so disposed, or if a lot of the stuff got loose on the premises.

I suddenly imagined myself many years from now confronted by a commission that had gotten rather bored, as well it

might, with the follies and futilities of man, or even with the stubborn unwillingness of the common Congressman to take away his liberties; and the commission decided that the time had come to mutate the species, the male species of course—because when they got around to mutating the female of the species they would surely make them all Lana Turners; but as far as the stubborn male species are concerned they might decide the time had come to treat human beings with these radioactive particles in order to get a new type with a very large head, one eye, one ear bent permanently to hold a telephone, one armed, with only a forefinger and thumb for signing documents and checks, no legs and an anatomy constructed to fit most comfortably into a swivel chair. In other words, they might decide to make a human species—the Bureaucrats.

I consider this a very dangerous idea, but in order not to leave the matter on this humorous plane, I ask my colleague, Mr. Judd if he will explain to the House the truly scientific aspects of the transmutation of the species with atomic energy as he explained them to me earlier. And, although I speak entirely in fun, I think this question of the terrible dangers inherent in radioactive energy is in all seriousness, a further great argument for the need of civilian control for the next years, and another reason for voting for this bill.

The CHAIRMAN. The time of the gentlewoman from Connecticut has expired.

Mr. COOLEY. Mr. Chairman, I move to strike out the last two words.

The CHAIRMAN. The gentleman from North Carolina is recognized for 5 minutes.

Mr. COOLEY. Mr. Chairman, I am definitely delighted with my membership on the Committee on Agriculture. On that committee we have not discussed such technical subjects as atomic energy. Certainly, we have not discussed subjects as technical as the subject which has been discussed by the lady from Connecticut and the doctor from Minnesota. Frankly, I think we ought to forget that discussion and leave it right where it is.

Mr. Chairman, I have never seen this House in such an atmosphere of uncertainty and indecision. I agree with the lady from Connecticut that we seem to learn something new every hour about radioactivity and atomic energy, but, apparently, the more we talk about these things the more we are confused. The very distinguished and learned gentleman from Missouri admitted frankly that he was confused and after his very fine speech he said that he was going to take his seat and listen to the debate, in the hope that it would aid him in making up his mind. I know that the distinguished lady and distinguished doctor are confused, and I believe that most of us are confused.

It seems to me that when we consider the whole subject we are in a rather ridiculous position. According to the gentleman from Wisconsin, we are now providing for the sale of this new and mysterious power to our constituents. If this new discovery possesses the potentialities and possibilities indicated

by the lady from Connecticut, I certainly do not want any of it sold down in the Fourth Congressional District of North Carolina.

As I said yesterday, I am anxious, yes, most anxious, for the secrets of atomic energy to be controlled and carefully guarded. I do not think that it is necessary for us to take anyone else into our confidence in our efforts to keep better and guard the secret which has been pretty well guarded up to this moment. I am at a loss to understand why there seems to be such controversy over, and such lack of confidence in, our military men. We certainly know that the members of our armed forces are true, patriotic Americans, and they would do nothing to jeopardize or to imperil the safety of our country. When members of the committee have been asked why they object to military men being placed on this committee, they say that they object to it because it is a violation of the traditions of America for military men to participate in the deliberations of any committee within the civil branch of our Government. It seems to me that is a very, very, weak argument. We are dealing with something about which there are no traditions. We know nothing about atomic power. We know that it has not yet been perfected for military purposes. We are now in the experimental stage. We are still experimenting with the atomic bomb in Bikini. We know what the effect of the atomic bomb is because we have seen its results at Hiroshima and Nagasaki. Why can we not rest easy and let the development of atomic energy for peaceful pursuits remain unknown for a few months, until at least the peace documents are prepared and signed?

Mr. JENSEN. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield to the gentleman from Iowa.

Mr. JENSEN. Does not the gentleman agree with me that there are as many potential dangers to the peace and security of the world in this legislation that we are now considering as there are in the atomic bomb itself?

Mr. COOLEY. I do not know whether in degree I agree with the gentleman exactly, but I do say that there is great danger in this situation. We talk about being fair and we talk about dealing fairly with all the people of the world. Here is a secret that cost \$2,000,000,000 and, incidentally, has cost thousands and thousands of human lives, as witnessed by the destruction of Nagasaki and Hiroshima, and yet we are talking about sharing the secret with other peoples of the world before we even have full knowledge ourselves.

Mr. ARENDS. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield to the gentleman from Illinois.

Mr. ARENDS. In view of what the gentleman is saying, and the impression that was given awhile ago, does he not think the smart thing to do would be to recommit this bill at the present time?

Mr. COOLEY. I agree with the gentleman.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield to the gentleman from California.

Mr. VOORHIS of California. I am sure that the gentleman from North Carolina does not think that by recommitting this bill we somehow or other make atomic energy stand still in other countries.

Mr. COOLEY. I think we can at least control the secrets that we have here and leave it in the hands of the military people.

Mr. DURHAM. Mr. Chairman, I move to strike out the last word.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. DURHAM. I yield to the gentleman from Kentucky.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this section and all amendments thereto close in 5 minutes.

Mr. BIEMILLER. I object, Mr. Chairman.

Mr. MAY. Mr. Chairman, I move that all debate on this section and all amendments thereto close in 5 minutes.

The motion was agreed to.

Mr. DURHAM. Mr. Chairman, I do not stand in the well of the House to lecture on biology, or to lecture to any Member. I do not think I am any scientist, but I just wonder to what level this debate will fall, if we will stop and just think about ourselves, what the scientists in this world have given us. We should think about the great Scotchman, Watt, who invented the steam engine. We should think about the other great inventors, of the barometer and thermometer, compass and many other inventions that have aided our welfare. Yet here in this House today we are poking fun at the people who have given to this world today a problem that we have got to solve ourselves.

Mr. MURDOCK. Mr. Chairman, will the gentleman yield?

Mr. DURHAM. I yield to the gentleman from Arizona.

Mr. MURDOCK. I imagine the gentleman has some such thought and feeling as I have. Fun has been poked at inventors and inventions before this, even in this body. Does the gentleman recall that about 100 years ago when Morse proposed his electric telegraph and needed money to help with it, there were plenty of people, even Members of Congress, who facetiously wanted to spend money instead on investigating several other things instead of the telegraph? People poked fun at that effort in that day, but the people who made fun had a laugh on the other side of their faces in after years. Any way we look at it, atomic energy is a serious matter.

Mr. DURHAM. I thank the gentleman.

The Clerk read as follows:

CONTROL OF INFORMATION

SEC. 10. (a) Policy: It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy, the Commission shall be guided by the following principles:

(1) That information with respect to the use of atomic energy for industrial purposes should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and en-

forceable international safeguards against the use of such energy for destructive purposes have been established; and

(2) That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.

(b) Dissemination: The Commission is authorized and directed to establish such information services, publications, libraries, and other registers of available information as it may deem necessary or desirable to provide for the dissemination of information in accordance with subsection (a).

(c) Restrictions:

(1) The term "restricted data" as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security.

(2) Whoever, lawfully or unlawfully, having possession of, access to, control over, or being entrusted with, any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data—

(A) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with intent to injure the United States or with intent to secure an advantage to any foreign nation, upon conviction thereof, shall be punished by a fine of not more than \$20,000 or imprisonment for not more than 20 years, or both;

(B) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with reason to believe such data will be utilized to injure the United States or to secure an advantage to any foreign nation, shall, upon conviction, be punished by a fine of not more than \$10,000 or imprisonment for not more than 10 years, or both.

(3) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, acquires or attempts or conspires to acquire any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or imprisonment for not more than 20 years, or both.

(4) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, removes, conceals, tampers with, alters, mutilates, or destroys any document, writing, sketch, photograph, plan, model, instrument, appliance, or note involving or incorporating restricted data and used by any individual or person in connection with the production of fissionable material, or research or development relating to atomic energy, conducted by the United States, or financed in whole or in part by Federal funds, or conducted with the aid of fissionable material, shall be punished by a fine of not more than \$20,000 or imprisonment for not more than 20 years or both.

(5) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised and consulted with the Commission with respect to such prosecution.

(6) This section shall not exclude the applicable provisions of any other laws, except that no Government agency shall take any action under such other laws inconsistent with the provisions of this section.

(d) Inspections, records, and reports: The Commission is—

(1) authorized by regulation or order to require such reports and the keeping of such records with respect to, and to provide for such inspections of, activities and studies of types specified in section 3 and of activities under licenses issued pursuant to section 7 as may be necessary to effectuate the purposes of this act;

(2) authorized and directed by regulation or order to require regular reports and records with respect to, and to provide for frequent inspections of, the production of fissionable material in the conduct of research and development activities.

With the following committee amendment:

On page 33, lines 7 to 10, inclusive, strike out all of subsection (5).

Mr. MAY. Mr. Chairman, if I may be permitted to make an explanation of this amendment, I do not believe there will be any opposition to it.

This amendment was requested by the Attorney General of the United States because the language contained in the Senate bill, and which is stricken out here, would have taken completely out of the hands of the Department of Justice the power to prosecute or determine who should be prosecuted, and turned it over to this Commission. We thought that was taking away from the Department of Justice and turning over to a civilian commission a function that it is not proper to take away from it.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield.

Mr. DONDERO. For what reason was the Federal Bureau of Investigation entirely bypassed?

Mr. MAY. It is in the Department of Justice and this amendment takes care of it.

Mr. DONDERO. I understand that, but should not the violations and even all personnel connected with the Commission be investigated before the violations take place?

Mr. MAY. I think that is right. I agree with that.

Mr. DONDERO. I have a substitute amendment to cure that which will be offered when we reach page 50 of the bill.

Mr. MAY. When we get to that, we can vote on that amendment at that time.

Mrs. DOUGLAS of California. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, the explanation that the chairman of the Committee on Military Affairs has given for the striking out of this section sounds reasonable and would be reasonable if it were not for the fact that we are not dealing with an ordinary subject; we are dealing with atomic energy. The reason this section was put in the bill, and I have discussed this with Senator McMAHON at great length, as well as with some of the scientists, was that in the field of atomic energy there is a great deal of hysteria. It is a spectacular new force that we have gotten hold of, to say the least. The gentlewoman from Connecticut has given her playfully, imaginative conception of what atomic energy may mean in one instance to mankind. I wish I had the time here to tell you about one of the byproducts of fissionable material that will revolutionize research in many fields—radioactive materials. This

is no figment of the imagination. This is a certainty. I wish I could tell you what a sufficiency of radioactive material will mean in the treatment of skin cancer, and what it will mean to medicine in general. It will mean more than anything that has ever been discovered—more even than the discovery of the microscope. I cannot adequately compare it with anything. The doctors just hold up their hands and say, "If we could only have enough radioactive materials, we could do so much to help mankind." Well, you can have enough radioactive materials through the proper control of atomic energy. It means medicine and agriculture may be revolutionized. For the first time, doctors will be able to tell what a medicine actually does in a person's body because by the use of radioactive materials they can trace a medicine and its effect upon certain organs of the body. The same thing can be done with food. It means that we can grow crops that will be resistant to too much water or resistant to too much dryness.

For instance, Japan went into China and attacked China because they said they could not support their people on their small area of land. That was their reason as they gave it. It was not true but no such excuse can be given in the future. This in the future may mean perhaps that on a small amount of land there can be raised a hundred times or a thousand times more food than has ever been raised in the past. Think what this will mean to the undernourished people of the world. These are just a few of the things that will come from the byproducts of atomic energy. But to get back to the amendment. With this provision stricken out, the United States attorneys throughout the country would be able to bring suit against scientists in their districts for supposed violations of security regulations. You know that in many of the United States attorneys' offices in the rural districts there may be 1 person or 2 persons or perhaps 3 persons at the most. They cannot possibly be conversant with the subject of atomic energy. Good heavens, Congress itself is not conversant with the subject of atomic energy. If you have a hysterical kind of witch hunting after scientists, you are going to drive them from this field. The only people who know what is a secret and what is not a secret are the scientists. If a case does come up, this does not mean that you are doing away with prosecution. It only means that before the Attorney General acts, the United States attorney from any particular section of the country refers the case to the Attorney General and through his office the Commission is contacted so that they will not be prosecuting someone for a secret which the entire world has known for the last 10 years.

If we drive the scientists out of this field, I tell you we are destroying our defense. You are not protecting the American people. You are weakening our defenses. You are not keeping us in our preeminent position in science. The scientists will not stay in this field if they are hounded—if their good names are needlessly, stupidly dragged in the mire—if they are subject to hysterical, sensa-

tional publicity. A scientists' reputation is severely injured by the mere initiation of a prosecution regardless of whether or not he is ultimately acquitted. I was shocked and horrified to hear the name of the great Dr. Condon and Dr. Urey brought up in a derogatory manner on this floor the other day. Dr. Condon was the associate director of Westinghouse for 10 years and is now the head of the Bureau of Standards. Dr. Urey won the Nobel prize for having discovered heavy water without which the atomic bomb could not have been made. It is that kind of loose talk which will not give us any defense in the future, but will strip us of the real defense in this field.

Mr. JUDD. Mr. Chairman, will the gentlewoman yield?

Mrs. DOUGLAS of California. I yield.

Mr. JUDD. May I ask for clarification of one statement I understood the gentlewoman to use. Did she say the Japanese were compelled to go into China for food, because if so, that is not true.

Mrs. DOUGLAS of California. No. I did not say that.

Mr. JUDD. Did I not understand the lady to say that it was an economic necessity for Japan to go into China?

Mrs. DOUGLAS of California. I said that was one of the reasons the Japanese gave. That is what I said. But the gentleman has been to China and knows it well. The gentleman remembers the great vast areas in China with dry soil on which nothing can be raised. Research with radio active nitrates may some day turn those lands into fertile fields.

Mr. JUDD. But I did not want the idea to get abroad that the Japanese were compelled to go to Asia to get food, as has been so commonly believed. The Japanese have always had an adequate supply of rice, fish, and vegetables for their own population.

Mrs. DOUGLAS of California. I agree with you perfectly.

The CHAIRMAN. The time of the gentlewoman from California has expired.

The question is on agreeing to the amendment offered by the gentleman from Kentucky [Mr. MAY].

The amendment was agreed to.

The Clerk read as follows:

Committee amendment: Page 33, line 11, strike out "(6)" and insert "(5)."

The committee amendment was agreed to.

Mr. ELSTON. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. ELSTON: On page 30, strike out lines 17 to 23, inclusive.

Mr. ELSTON. Mr. Chairman, before we vote on this bill, if it reaches that stage, I hope we will give very serious consideration to section 10, particularly to that part of section 10 which is the subject of my motion. Let me read it:

(1) That information with respect to the use of atomic energy for industrial purposes should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established.

Note that it starts out with the premise that the Commission in controlling the dissemination of restricted data must do so in a manner as to assure the common defense and security of the United States. Then it goes on to provide that it shall be the policy—and that policy is laid down by the Congress—to share with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that effective and enforceable safeguards have been established. In other words, if we pass this bill with this part of section 10 in it, Congress has definitely gone on record as favoring a policy that the Commission shall share with other nations, on a reciprocal basis, information with respect to the use of atomic energy for industrial purposes. All that is necessary before the Commission begins the dissemination of this information, is for Congress to establish by a joint resolution that international safeguards have been set up. If anybody can tell me why we should commit ourselves in advance to a policy as broad as that, I certainly would like to have them do it. Consider for a moment what atomic energy may mean to industry over the years. It does not make any difference what it may cost the industry of this country, the information has to be shared with other nations.

I know, of course, that the bill provides for an exchange of information on a reciprocal basis, but the Commission itself will determine what is to be exchanged. The Commission can take anything in return for the information it furnishes. Obviously, the time may come when some international organization will agree on safeguards; and the time may come when this Congress will by joint resolution determine that safeguards have been set up; but what has the setting up of those international safeguards got to do with the transmission of information to other nations with respect to the use of atomic energy for industrial purposes? If we develop in this country, as he have, atomic energy for any purpose at all, is there any reason why we should share it with other nations except probably as a matter of mutual safety? Is there any reason why we should transmit to other nations information that will enable them to compete with American industry although they may give little or nothing in return? The policy would be a strange philosophy in America. I know no precedent for it. I do not recall that we ever at any time in our history went on record in the Congress of the United States as saying that anything that was developed by industry in this country should be shared with the industries of other nations.

Since the Commission, under this bill as now written, will own or control every patent dealing with the subject of atomic energy, this section of the bill will also authorize the sharing of American patents with any nation in the world.

The CHAIRMAN. The time of the gentleman from Ohio has expired:

(Mr. ELSTON asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, I am completely in disagreement with my good friend and colleague from Ohio on his presentation of the amendment he has just offered.

This is a very simple bill understood, perhaps, if and when you look carefully at two words in the language used. This is under the general heading of control of information, and it expressly provides that the control and dissemination of restricted data shall be by the Commission. For what purpose? "To assure the common defense and security."

The particular section that the amendment would strike out is subsection 1 of section 10, and it reads this way:

All information with respect to the use of atomic energy for—

Two words now—

Industrial purposes should be shared with other nations on a reciprocal basis as soon as—

What now?—

as soon as Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established.

This section clearly imposes upon this Commission to restrict that data that would affect the common defense until such time as Congress has declared by a joint resolution, I assume, that it is in the interest of the national security that civilian uses of it be shared with other countries on a reciprocal basis. That is so simple and so plain to me that I cannot quite understand the reasoning of my fine colleague.

Mr. THOMASON. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield.

Mr. THOMASON. Is not the important thing that no information can be released until Congress itself, the people's representatives, by a joint resolution, says that international safeguards against the use of atomic energy for destructive purposes have been established? I just do not know how you could have a more democratic way of control than to leave it to a joint resolution of Congress.

Mr. MAY. If the provision is stricken out, it opens the gate wide for the Commission to have power to do it. This would prevent them from doing it at all until the Congress says so.

Mr. BATES of Massachusetts. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Massachusetts.

Mr. BATES of Massachusetts. I think the point the gentleman expressed was the use of this for industrial purposes irrespective of patent rights. That is what is involved. Is there in the opinion of the gentleman any more reason for disseminating this information for industrial purposes, free of any cost, than spreading or disseminating information in respect to any patents now existing in this country for industrial or for any other purpose after we spent over \$2,000,000,000 for it?

Mr. MAY. I can imagine there might arise a situation in international negotiations if it were proposed that there should be a widespread dissemination of atomic energy for civilian purposes under

some subcommittee or other organization established by international agreement, it might be the means of obtaining a concession against the military use of atomic energy by some other nation.

The CHAIRMAN. The time of the gentleman from Kentucky has expired.

Mr. BROOKS. Mr. Chairman, I move to strike out the last two words.

Mr. Chairman, I merely want to call the attention of the Committee to a single point in reference to the amendment suggested by my good friend and able colleague the gentleman from Ohio [Mr. ELSTON]. The confusion exists in reference to the meaning of the word "reciprocal." I do not take the term "reciprocal basis" to mean gratuity or free. I take it to mean that it is a "mutual basis" of self-interest. Where two countries deem it to the mutual advantage of each country to enter into a reciprocal agreement, an agreement in which both gain an advantage, that agreement then would be possible only after a joint resolution of the Congress. That does not mean a gift, it does not mean a gratuity, it does not mean giving away something for nothing; it means a mutual agreement where both nations profit; and when the Congress looks into it and passes a joint resolution, the action is made final—and, by the way, a joint resolution has the same sanctity as law. It is passed by both the House and Senate and signed by the President. I see nothing wrong at all in that paragraph as written.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. BROOKS. I yield to the gentleman from California.

Mr. JOHNSON of California. That very type of reciprocal program is being carried out in the matter of agriculture in my State of California, for instance, in reference to the exchanging of ideas in regard to fruits and grapes, and also in reclamation work and in river and harbor work, as well as in communications. We have the reciprocal interchange of ideas and information.

Mr. BROOKS. I say running through each agreement must be the mutual interest of both countries; they enter into an agreement for the mutual advantage of both.

Mr. BATES of Massachusetts. Does the gentleman mean to infer, by referring to agriculture, that those same reciprocal arrangements are made in connection with patent rights affecting the great industries of this country by which we have grown beyond the industries of any other country in the world?

Mr. BROOKS. The gentleman is a most capable Member of Congress. He has studied those things. The gentleman knows that no such strained construction can be placed on this language as intimated by him.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. BROOKS. I yield to the gentleman from Ohio.

Mr. ELSTON. I would like to ask the distinguished gentleman from Louisiana, who is a very capable lawyer, if he knows of any precedent for this type of legislation? Does the gentleman know of any time in history when Congress went on

record saying that we should exchange information with respect to the industrial use of any type of power with other nations?

Mr. BROOKS. Not with reference so much to information as to reference with mutual advantages. I think that has been very well written into our laws, and I do not think there is anything new or startling or dangerous about it, especially when it is necessary to come back to this same body here, back to the United States Senate and the President to reaffirm this principle and decide when it is time to act.

Mr. CHURCH. Mr. Chairman, will the gentleman yield?

Mr. BROOKS. I yield to the gentleman from Illinois.

Mr. CHURCH. Will the gentleman refer to the word "information" again and answer me whether or not the word "information" cannot and does not definitely mean the know-how that we have heard so much about; the know-how of the atomic bomb secrets? Cannot "information" mean the know-how?

Mr. BROOKS. I will say this to the gentleman. Of course, the word "information" is generic in its terms, but I think the thing the gentleman overlooks is the fact that the agreement to which this section refers is for our mutual advantage and, further, it can only be effected after we agree to it.

Mr. BIEMILLER. Mr. Chairman, will the gentleman yield?

Mr. BROOKS. I yield to the distinguished representative from Wisconsin.

Mr. BIEMILLER. I would like to observe that there has been some exchange of information between private trusts, through cartels, relating to deals between Standard Oil and the Farbenindustrie, and I think we have far more to fear if we go ahead with private patents in that there will be a bad exchange of information.

The CHAIRMAN. The time of the gentleman from Louisiana has expired.

Mr. PRICE of Illinois. Mr. Chairman, I move to strike out the last two words.

Mr. Chairman, I would like to briefly give the reasons why I believe section 10, control of information, was placed in the Senate bill. Discussion of the secret of the atomic bomb is subject to certain misconceptions. First, the secret is not permanent since it consists entirely of natural phenomena capable of discovery sooner or later by competent scientists anywhere. Just 3 days ago we read in a local newspaper an article in which a Jap scientist was well on his way to finding the secrets of the atomic bomb, using equipment that scientists in this country estimated cost \$25.

Second, perhaps the major part of the pure science involved was known throughout the world before the war; and, third, the real advantage is largely a combination of technological advances in design and construction of equipment, and the fact that the United States already has equipment which takes a long time to construct.

In controlling the dissemination of secret information, there are two basic objectives which tend to conflict with one another. Reasons of security require

complete control of information which might help other nations to build atomic weapons. At the same time sufficient freedom of interchange among scientists must be provided if we are to maintain our preeminent scientific position. The bill expressly states these policy objectives and subjects not only atomic weapon information but atomic power information to control with serious criminal penalties for illegal dissemination of information. To assure scientific progress the Commission may free information in the restricted category if it determines the value of such dissemination outweighs the value of secrecy.

Mr. FENTON. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, first of all, I want to allay any fears that my colleagues may have that I am going to give you any scientific talk on this legislation. I promise you I will not add to your confusion, but rather, as a general practitioner of medicine, attempt to give you my viewpoint and diagnosis in plain language and use an illustration that is well known to all of us.

Mr. Chairman, as one member of the House Military Affairs Committee who has been in fairly constant attendance at its meetings—especially during its deliberations of this bill—I feel that you must all agree that we should proceed with great caution and care.

In my opinion we will have gone far afield from the American way of life if we act too quickly on this bill.

Mr. Chairman, the old backbone of this great country of ours is beginning to sag. The heavy weight of all countries upon our spinal column is beginning to compress our spinal cord to such an extent that it soon will be completely severed and paralysis will result, unless it is supported by a good strong brace.

We possess that brace in the secret of the atomic bomb and certainly for the time being we should not throw or give it away.

Personally, I am of the opinion, that since we have control of this secret bomb that we should not be in a hurry to share it with any other country or countries.

I believe that peace will be attained much quicker by keeping what we have; and, in so doing we will in no uncertain terms serve notice to those people who are continually blocking the efforts of our peace-making representatives that we expect to retain the secret until at least peace has been declared.

For, with the state of uncertainty now existing with our peace proposals, as evidenced by our Secretary of State and others in their reports to the country on the progress of peace negotiations it would appear to me that this is not the time for this legislation.

To enact S. 1717 would to my mind give a lot of aid and comfort to a certain group—that at the moment is using to its own advantage—as a member of the Security Council, its veto rights.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on the pending amendment and all amendments thereto close in 25 minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

The CHAIRMAN. The Chair recognizes the gentleman from Michigan [Mr. DONDERO].

Mr. DONDERO. Mr. Chairman, sometime this afternoon we hope to come to a very important decision on this bill. No doubt the most important decision we will be called upon to make in this session of Congress. I am sure the one underlying motive of all of us will be what is for the best interests of our country. Everybody admits that we are dealing with the most destructive force ever devised by the human race. We are asked to share or divulge its secrets, which we now hold, with other governments. Not long ago some members who now advocate the passage of this bill, S. 1717, with all its implications for the dissimulation of information about this almost supernatural power, took this floor and urged the passage of the draft bill in support of our Secretary of State who was then battling in Paris against powers opposing peace and who recognize force only to achieve their objective. Yet, the country is still at war technically. Its termination has not been declared by the President of the United States. Neither has its termination been declared by the Congress of the United States. Several times since hostilities ceased and several times since the United Nations conference at San Francisco the nations of the world have endeavored, through meetings, to bring peace upon this earth. Up to this present hour, those attempts have very largely failed. On the 29th of this month in Paris, France, the nations of the world will convene again in the hope of making some progress to achieve peace upon this earth. If that conference had been held on the 29th of June instead of the 29th of July next and if that conference like all other previous conferences had come to the same conclusion and brought forth very little if any progress toward peace, would we be here this afternoon debating whether or not we would share this most destructive power with some other nations of the world? Some ideologies of government believe there is only one force on this earth, and that is brute force. The able gentleman from North Carolina, [Mr. COOLEY] touched upon this matter a few moments ago. I heartily agree with him when he says that peace treaties have not been written. Peace treaties have not been agreed upon. Their terms have not been arrived at. They have not even come to sit around a table to formulate any particular plan or program on the basis of which peace might be obtained. The peace of the world thus far has been vetoed. Yet, here we are proposing to give to the world the most destructive engine mankind has ever created. What can we lose by recommitting this bill to the Committee on Military Affairs and leaving the secrets of the atomic bomb where they now are, and that is the agency of our Government charged with the defense of our Nation. Let us see what happens after the conference in Paris on the 29th of this month. Nothing can be lost but

much can be gained, if we defer this matter until we know whether or not universal peace can be established upon this earth. We have provided all the legislative machinery necessary for that high purpose. Until that time comes, I believe, my colleagues, that we can serve our country best by deferring action upon this bill. Therefore, I am going to vote to recommit this measure to the Committee on Military Affairs for further study and consideration. I hope a motion to recommit will be adopted.

(Mr. DONDERO asked and was given permission to revise and extend his remarks.)

Mr. VORYS of Ohio. Mr. Chairman, consideration of this amendment is a preview of what we are going to do on section 10, the patent section. This amendment offered by my distinguished colleague from Ohio [Mr. ELSTON] leaves in the statement of policy the assurance of common defense and security, and then permits and encourages "dissemination of scientific and technical information relating to atomic energy."

Mr. HARNESS of Indiana. Mr. Chairman, will the gentleman yield?

Mr. VORYS of Ohio. I yield.

Mr. HARNESS of Indiana. I have an amendment at the desk to strike out subsection (b), on page 31, which is entitled "Dissemination."

Mr. VORYS of Ohio. There is no amendment pending now to strike out the provision for dissemination of scientific and technical information.

PROTECTION OF OUR PATENT SYSTEM

The provision that would be stricken out by the present amendment is a provision for the dissemination of information with respect to the use of atomic energy for industrial purposes. The most important information about any industrial process or any industrial gadget is, under our way of life, contained in patents. It is provided by section 10, as the bill is now written, that this Commission is to have a monopoly on all former patentable information remotely connected with atomic energy, and unless this present section is stricken out, the Commission is to have the right, subject to military requirements, to pass out industrial information to all the world that would otherwise be subject to patents.

THE REAL ISSUE—DISARMAMENT

There is another reason why I think this language should be stricken out. This section provides for sharing information on industrial uses of atomic energy when the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes have been established. Thus we are asking international safeguards only against atomic weapons, and saying nothing about other weapons. There is not only confusion in this House, but there is confusion at New York in the United Nations on this subject. We have gotten ourselves so fascinated and horrified by atomic energy that we are forgetting about some of the other forms of destruction. We gain nothing for our own security, or for world peace, when we outlaw the one weapon in which we excel,

in order to enter an international armament race in all other forms of destruction. By the above language we would bind ourselves to furnish the industrial know-how to other nations for them to use atomic energy in the manufacture of other weapons, V-2 bombs, rockets, after the atomic bomb itself has been outlawed.

We should not forget that the most destructive force, up to the present time, including the atomic bomb, is mass armies. We have in Japan a unique case of a nation that succumbed without invasion, but you ask them in China or Poland or Germany or Russia about mass armies, and they will tell you they are more destructive to life and property than anything that has ever been invented. Up to date the Roman broadsword is the deadliest weapon ever invented, based upon actual records of killed and wounded. Total conscription is a comparatively new weapon in history and has been developed by Germany, Japan, and Russia to a superstate of efficiency and destructiveness. Total conscription, which drafts part of the population for fighting and the rest for labor in industry and agriculture, requires complete regimentation, complete surrender of individual freedom. We do not like it. We will not be good at it. Are we going to outlaw the one weapon in which we excel in order to compete with the rest of the world in the one weapon in which we do not excel and do not want to excel?

The U. S. S. R. now has a population of about 170,000,000 and the population of the countries it has taken over since 1939 is, in Europe, 118,000,000 and in Asia 130,000,000. Thus the Soviets have a manpower pool of 418,000,000 people. The birth rate in Soviet Russia is so high compared with ours that in 1970, 24 years from now, they will have approximately 100,000,000 more population than the United States. In 9 years the Soviets will have 36,900,000 men between the ages of 15 and 34. If we eliminate all other weapons, except conscripted mass armies, what nation in the world will be unquestionably the greatest military power?

Let me quote some sentences from the Baruch report.

Let us not deceive ourselves: We must elect world peace or world destruction.

Only in the will of mankind lies the answer.

But before a country is ready to relinquish any winning weapons it must have more than words to reassure it. It must have a guaranty of safety not only against the offenders in the atomic area but against the illegal users of other weapons—bacteriological, biological, gas, perhaps, why not? against war itself.

In the elimination of war lies our solution, for only then will nations cease to compete with one another in the production and use of dread secret weapons which are evaluated solely by their capacity to kill. This devilish program takes us back not merely to the Dark Ages but from cosmos to chaos.

Yet in spite of these eloquent, penetrating words of wisdom in the Baruch report, Mr. Baruch and our leaders in the United Nations seem to be striving solely for international outlawry of atomic warfare. We should face the fact that only by total war against all warfare can we secure peace for the world and security for ourselves.

I had hoped that some part of this bill would be devoted to this subject. Instead, I find that this bill keeps so far away from it that I have been unable to devise an amendment on the subject that would be in order. I can only express here the hope that our leaders will do something on the international front about total disarmament before they commit us on outlawing the atomic bomb and sharing industrial uses of atomic energy. Adoption of the Elston amendment would be at least a congressional gesture in the right direction.

The CHAIRMAN. The time of the gentleman from Ohio has expired.

The Chair recognizes the gentleman from New York, [Mr. REED].

(Mr. REED of New York asked and was given permission to revise and extend his remarks.)

Mr. REED of New York. Mr. Chairman, the problem of the atomic bomb ought to be decided in the light of history. We all want peace, pray for peace, yet there is no peace. What does history disclose? J. Novicow, vice president of the International Institute of Sociology, points out that: "From the year 1496 B. C. to A. D. 1861, in 3,358 years, there were 227 years of peace and 3,130 years of war, or 13 years of war to every year of peace. Within the last three centuries," so the author reminds us, "there have been 286 wars in Europe." Even more significant, now that peace negotiations are being conducted, Mr. Valbert says: "From the year 1500 B. C. to A. D. 1860 more than 8,000 treaties of peace meant to remain in force forever were concluded. The average time they remained in force is 2 years."

I know that a person is guilty of lese majesty to quote George Washington in these days of so-called brotherly love, the good neighbor era, the share-the-wealth program, the share-the-raw-material and share-the-atomic-bomb-secrets in the new warless age of international affection and good will. George Washington uttered these prophetic words with full knowledge of the bloody and almost constant wars throughout the world prior to A. D. 1790. I quote from Washington's Farewell Address of September 17, 1796, as follows:

Against the insidious wiles of foreign influence, I conjure you to believe me, fellow citizens, the jealousy of a free people ought to be constantly awake, since history and experience prove that foreign influence is one of the most baneful foes of republican government. * * * Europe has a set of primary interests which to us have none, or a very remote relation. Hence she must be engaged in frequent controversies the causes of which are essentially foreign to our concerns. Hence, therefore, it must be unwise in us to implicate ourselves by artificial ties in the ordinary vicissitudes of her politics, or the ordinary combinations and collisions of her friendships or enmities * * * Why forego the advantages of so peculiar a situation? Why quit our own to stand upon foreign ground? Why, by interweaving our destiny with that of any part of Europe, entangle our peace and prosperity in the toils of European ambition, rivalry, interest, or caprice?

Does the number of wars since 1800 to the present day hold out to suffering mankind the prospect of an era of universal peace? Let us look at the record:

TIME-TABLE OF EUROPE'S WARS

- 1801: The old German Empire breaks up, and all territory on the left bank of the Rhine is ceded to France.
- 1802: French aggressions in Holland, Italy, and Switzerland.
- 1805: England declares war on Spain. France fights Austria.
- 1806: Napoleon enters Berlin.
- 1807: Napoleon defeats Russia.
- 1808: Napoleon invades Spain.
- 1810: France annexes Holland. Turks driven out of Balkans.
- 1812: War starts between United States and England.
- 1812: Napoleon declares war on Russia.
- 1814: France invaded from all sides. Napoleon to Elba. British seize and burn Washington.
- 1815: Napoleon leaves Elba, is defeated by British and Germans at Waterloo, then sent to St. Helena for life.
- 1816: Holland annexes Belgium.
- 1817: British wars in India.
- 1822: Greeks and Turks at war. Civil war in Spain.
- 1823: French army enters Spain.
- 1824: British battle for Burma.
- 1825: Russia wars on Turkey.
- 1826: Russia invades Persia.
- 1827: Turks driven from Greece.
- 1828: Russia overruns Rumania.
- 1829: England and Austria intervene against Russia.
- 1830: Revolution in Poland and France. Belgium revolts from Holland.
- 1831: Prussia and Austria aid Russia against Poland.
- 1832: Egypt revolts against Turkey.
- 1838: French bombard Mexican ports. Debt collection, old style.
- 1839: Britain wars on China.
- 1846: War between United States and Mexico.
- 1848: Schleswig-Holstein fights Danish annexation.
- 1849: Danish-Russian war.
- 1850: Britain blockades Greece. Prussia and Austria war.
- 1854: France and England war against Russia.
- 1856: British war on China and Persia.
- 1861: Civil War in United States. British blockade runners supply South.
- 1864: Germans defeat Danes.
- 1866: War between several German states. Austria wars on Italy.
- 1868: Britain invades Abyssinia. Spanish revolution.
- 1870: Franco-German War.
- 1871: Alsace-Lorraine goes to Germany. Back to France in 1918 and back to Germany in 1940.
- 1874: Spanish civil war.
- 1876: Balkan wars.
- 1877: Civil war in Japan. Russia wars on Turks.
- 1879: British war on Zulus.
- 1880: Boers and British battle.
- 1881: France wars on Tunis.
- 1882: Britain wars on Egypt.
- 1884: Japan wars on Korea.
- 1885: Russia wars on Afghanistan.
- 1887: Balkan wars. Italy wars on Abyssinia.
- 1894: Japan wars on China.
- 1895: Belgium seizes Congo state.
- 1898: Spanish-American War.
- 1899: Britain wars on Boers.
- 1900: Boxer War in China, United States returns Boxer indemnities.
- 1904: Russian-Japanese War.
- 1910: Japan takes Korea.
- 1912: Balkan wars.
- 1914-1918: Russia, France, Britain, Italy, United States, Japan, Rumania, Serbia, Belgium, Greece, Portugal and Montenegro, 12 nations, battle Germany, Austria-Hungary, Turkey and Bulgaria.

1917-1918: The United States of America participated in the World War.

1920 to 1930: A breathing spell and period of disarmament conferences, which obviously disarmed no nation except the United States. European and Asiatic powers destroy League of Nations ideal.

1931: Japan seizes Manchukuo.

1932-33: Europe repudiates all World War debts to United States (\$12,000,000,000).

1934: Italy takes Abyssinia.

1937: Japan develops an "incident" in China.

1938-1939: Germany takes Austria, Czechoslovakia and Poland. Russia invades Poland. France and England declare war on Germany.

1940: Russia takes part of Finland. Germany seizes Denmark and defeats Norway. Holland, Belgium and France. Italy joins war against England.

1941: Germany and England at war. Russia, Italy, Rumania and Japan, against Germany in 1914, like the figures of the year, have reversed their positions and are with her in 1941. Bulgaria, Turkey, Greece, and Yugoslavia involved in conflagration. Starvation general throughout all Europe.

1941 to VJ-day: United States still at war.

The acrimonious battle of words now going on between the peace delegates of the respective nations still technically at war is no time to share military secrets with totalitarian or other foreign nations. The fewer persons in possession of the secret of this instrumentality of wholesale human slaughter, the safer mankind will be until a better understanding between nations has been attained.

I regard this legislation as premature, unwise, and not in keeping with our national safety.

[From the Washington Evening Star of July 19, 1946]

THE GREAT GAME OF POLITICS

(By Frank R. Kent)

BULLITT'S BOOK DEFLATES OPTIMISM OF SOVIET COLLABORATION FOR PEACE

In a recent summary of William C. Bullitt's just-published book, *The Great Globe Itself*, a foreword says that "unquestionably it will become a major topic of discussion." To even a casual reader this will appear an understatement.

If the considerable number of extremely articulate persons in this country who insist that sympathetic understanding and friendship with Russia is the only means by which we can promote peace in the world and international cooperation become a reality do more than discuss Mr. Bullitt's book, it will, indeed, be remarkable. For as trenchant, documented, and convincing an indictment of the Russian leaders, their methods, and their purposes has not before been made.

Great weight is given the Bullitt charges, first, because they come from a man who not only knows well modern Russia and the men who run that country, but who is a student of Russian history and an admirer of the Russian people; second, because the author was the first American Ambassador to Russia after our long delayed recognition in 1934. He went to Moscow openly friendly to the Soviet experiment.

Disillusioned in Russia

His disillusionment came while he was there—the result of close personal contact with the operations of the Russian system and personal experience with the Russian rulers. It has been greatly increased by their ruthless and aggressive policies—in clear violation of the Atlantic Charter, which Stalin indorsed—following the end of the

war and by their general course in every international gathering from the Yalta Conference on down to the recent meeting in Paris. The chronology of the acts and attitude here presented seem an unassailable basis for Mr. Bullitt's views.

In effect, he charges that the period after a war for the Soviet Government is not a period to make peace but to prepare for war; that the primary, compelling, and unchangeable motive of the government is the spread of communism throughout the world; that it conceives its own safety is involved in this as it is convinced that Russian communism cannot survive for long by the side of the capitalistic countries; that it is unalterably hostile to foreigners; that it signs treaties and makes agreements not with any idea of keeping them but only because they appear expedient at the time; that Stalin grossly deceived Mr. Roosevelt when he pledged himself not to promote communism in this country; that the Soviet word is not good, that the Russian rulers regard everything, including fraud, deceit, and murder as justifiable to perpetuate their own power and promote the Communist purpose.

Warfare always

"In the eyes of the Soviet Government," writes Mr. Bullitt, "the Soviet Union is always engaged in warfare, open or concealed, with the non-Communist states of the world. And where it embraces in friendship a non-Communist government, it is always with the ultimate intention of driving a dagger in its back. That is why Stalin is unappeasable. That is why Mr. Roosevelt's 'great design' was foredoomed to failure. That is why, for our own self-preservation, we must face the fact that Stalin, like Hitler, will not stop but can only be stopped."

These are terrific charges—particularly at this stage when such great—though apparently futile—efforts are being made to get Russia to cooperate wholeheartedly in the cause of peace and in the complete control of atomic energy. Certainly, it is true that far greater progress toward these goals would have been made in the past year but for the obstructions offered by the Soviet representatives. Mr. Bullitt is neither an irresponsible nor a reckless man. He presents facts to support his contentions. He is a detached man without a grievance and no cause to serve other than the truth. Such a book by such a man cannot easily be passed over.

Superior force necessary

Undoubtedly, he will be denounced by those who resent any reflection on the honor and purity of the Russian leaders. Nevertheless, the book is well calculated to increase the number of those who believe as Mr. Bullitt believes, that the only way to deal with the Soviet rulers is by confronting them with superior force.

"The most legitimate use of force on earth," says Mr. Bullitt, "is to gain time to permit the growth of moral ideas. It will take some time for moral ideas to grow in the Soviet Union. There is no way to prevent it from conquering non-Communist states during that time except the hard way of keeping it constantly confronted by superior force."

It is interesting that the series of articles recently appearing in the New York Times by Brooks Atkinson, just returned after a year as Times correspondent in Moscow, fully sustains Mr. Bullitt's view that friendship with Russia is impossible and that for us to hope for mutual, sympathetic understanding is to delude ourselves. It is also interesting that the appearance of the Bullitt book coincides with the recent attack by Attorney General Clark on Communists in this country and his reference to a vicious plot to destroy our Government. For these remarks, the lawyers' guild—which has a heavy Communist flavor—passed denunciatory resolutions condemning Mr. Clark as a Red baiter.

The CHAIRMAN. The gentleman from South Dakota [Mr. CASE] is recognized for 4 minutes.

Mr. CASE of South Dakota. Mr. Chairman, I offer an amendment:

The Clerk read as follows:

Amendment offered by Mr. CASE of South Dakota:

On page 30, line 18, strike out "should" and insert "may."

In line 18 strike out "as soon as" and insert "only after."

Mr. CASE of South Dakota. Mr. Chairman—

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. CASE of South Dakota. I yield to the gentleman from Kentucky.

Mr. MAY. Is the gentleman's amendment offered as a substitute for or a modification of the pending amendment?

Mr. CASE of South Dakota. My amendment is offered as a perfecting amendment to the language in the bill. Mr. Chairman, I think I share with every Member of the House the feeling that once in a while we get sort of punch-drunk on words and it becomes difficult and perhaps wearying to try to follow the technical language of a bill. Nevertheless, we try. And I shall try to be brief and direct in my remarks.

The gentleman from Ohio [Mr. ELSTON] is to be congratulated for having drawn attention to the importance of this section on the control of information; but I would raise a question as to whether or not the entire elimination of this paragraph may not have the reverse effect of that intended. If this paragraph be lifted from the bill just what restriction remains in the bill to restrain the Commission from doing the very thing he fears?

The chairman of the committee, the gentleman from Kentucky [Mr. MAY], and the gentleman from Louisiana [Mr. BROOKS] have said in defense of keeping this subparagraph of the bill that it would permit the Commission to exchange this information on a reciprocal basis "only after" Congress passes a joint resolution, but actually that is not what the language in the bill says. The language in the bill is a directive and not a limitation. The language in the bill says that as soon as Congress passes a joint resolution the Commission "should" share this information. In other words, it gives an affirmative directive to the Commission. If it be intended that this be a safeguard and that this information may be shared with other nations on a reciprocal basis only after Congress has passed a joint resolution, then the language in the bill should clearly say that. That is what my amendment proposes to do by striking out the word "should" in line 18, and inserting in lieu thereof the word "may", and striking out the words "as soon as" in line 19, and inserting in lieu thereof "only after". The language then becomes a limitation upon the Commission rather than a directive.

Mr. VORYS of Ohio. Mr. Chairman, will the gentleman yield?

Mr. CASE of South Dakota. I yield.

Mr. VORYS of Ohio. Is it not true that the gentleman's amendment if adopted would still leave in this bill an

advance promise of Congress to have this Commission furnish industrial information much of which up to now has been contained in patents?

Mr. CASE of South Dakota. No; I think that is not quite true, because with this section out of the bill you would have no restriction on the Commission, and it could release the industrial information at any time. To express the intent Members have voiced, a restriction should be clearly written in the bill saying that the Commission may dispense this information only after Congress, by a joint resolution, has said that adequate safeguards have been established, and the joint resolution has been signed by the President.

I hope my amendment will be adopted.

Mrs. ROGERS of Massachusetts. Mr. Chairman, will the gentleman from South Dakota yield?

Mr. CASE of South Dakota. I yield.

Mrs. ROGERS of Massachusetts. It is true, is it not, that the President did not share this secret with Russia during the war?

Mr. CASE of South Dakota. I do not know.

Mr. McDONOUGH. Mr. Chairman, will the gentleman yield?

Mr. CASE of South Dakota. I yield.

Mr. McDONOUGH. Does the gentleman mean only after Congress declares by joint resolution that adequate and enforceable international safeguards have been put into effect, or only after the Congress by joint resolution declares that the war is over? There are two considerations there. These international safeguards could be declared before the period of the war has ceased.

Mr. CASE of South Dakota. Well, that would depend on Congress. Congress would have to use its own judgment as to whether effective international safeguards had been established. I doubt that the Congress would find that proper international safeguards had been established unless the war had been declared at an end.

The CHAIRMAN. The time of the gentleman from South Dakota has expired.

The Chair recognizes the gentleman from Wisconsin [Mr. BIEMILLER].

(Mr. BIEMILLER asked and was given permission to revise and extend his remarks.)

Mr. BIEMILLER. Mr. Chairman, there have been times in this debate that I have been wondering if we were discussing S. 1717 or if there has been some substitute bill introduced here which has not been made available to all the Members. I have heard Members on this floor speak constantly about a bill that is going to immediately share the secrets of the atomic bomb with other nations. I have thoroughly read this bill a good many times, I have read the report of the Senate, I have read the report of the House committee, and I can find absolutely nothing in the bill or in the reports about the immediate sharing of the present technological secrets of the atomic bomb with other nations. I think we ought to recognize that fact and not be discussing extraneous issues at this stage of the game.

Mr. CASE of South Dakota. Mr. Chairman, will the gentleman yield?

Mr. BIEMILLER. I yield to the gentleman from South Dakota.

Mr. CASE of South Dakota. Will the gentleman read the paragraph under consideration for that certainly uses the words "shall be shared."

Mr. BIEMILLER. Yes, but the bill further reads "As soon as the Congress declares by joint resolution that effective and enforceable international safeguards against the use of such energy for destructive purposes has been established."

Mr. CASE of South Dakota. That is a directive that as soon as that is done it should be shared. The amendment which I have offered simply said that it is only after those safeguards have been created that the Congress might do that.

Mr. BIEMILLER. I think that is quibbling over language. Furthermore, that section, as the gentleman from South Dakota well knows, refers only to the use of atomic energy for industrial purposes. It says absolutely nothing about sharing the technological processes of the atomic bomb.

Why are we trying to confuse the issue here? Actually, if we are going to follow the policy that some Members of this House have been suggesting, what we will do is put an effective stop to further experimentation on the part of American scientists. You have been told repeatedly on this floor, and I know it is correct, that almost all of the scientists who were working for the Manhattan district have left that project. There is no real experimentation going on there today. The Army as such did not do the experimenting during the war. All of the technological processes that resulted in the atomic bomb were done by civilian scientists and directed by civilian scientists.

Why should we take this great chance you are asking us to take? The Manhattan project will not result in any further experimentation. Secretary Patterson has asked that the Army be relieved of this responsibility. The establishment of an Atomic Energy Commission in the form proposed by the McMahon bill when it left the Senate will give us a chance to perfect our knowledge of atomic energy.

Mr. LANHAM. Mr. Chairman, will the gentleman yield?

Mr. BIEMILLER. I yield to the gentleman from Texas.

Mr. LANHAM. If section 11 should be stricken from the bill or remain in the bill as it is, unless my amendment to that section is adopted, would not this provision in the bill give the Commission the right to transfer patent rights in America without any registration or authorization of them in foreign countries to foreign countries?

Mr. BIEMILLER. On the contrary, what I am afraid of is that if the amendment of the gentleman from Texas is adopted what we will do is make available the secrets of the atomic bomb. The gentleman's amendment would permit private individuals to patent atomic weapons. All such patents must carry a full description which would be available to the public. Any smart secretary or technician would then have all the information he would need. I hope we

can discuss that at more length when that particular amendment is before us.

Mr. LANHAM. They can under this provision in the bill certainly transfer our patent rights at will.

Mr. BIEMILLER. While I do not share the gentleman's point of view I am sure he would not claim that the bill would make the bomb processes public. The point I want to make specifically is that there is nothing in this bill as it now stands which if passed will result tomorrow morning in making the secrets of the atomic bomb available to any other nation on the face of this earth; yet that is the charge that speaker after speaker has thrown on this floor, the most recent being the gentleman from Michigan [Mr. DONDERO]. There is nothing in the bill of that kind. The bill is purely an effort to systematize in an intelligent manner further research in this country into the problem of atomic energy. That research is badly needed. If this bill is recommitment we will not have it.

The CHAIRMAN. The Chair recognizes the gentleman from North Carolina [Mr. FOLGER].

Mr. FOLGER. Mr. Chairman, I was about to become so impatient as to decide that if this part of the bill were eliminated, I would not vote for the bill at all. It is unthinkable to me that we in this country, who have the atomic energy secret so far as the manufacture of bombs is concerned, should become so isolated in our disposition and spirit as to be afraid to allow other countries of the world to take such portion of this developed energy as might be used for industrial purposes only.

I think it would be a great mistake to hold ourselves as possessing any such attitude toward the world as to be unwilling to share the industrial part of this discovery with other nations of the world. It should be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. That means we can hope, I suppose, that it will allay the suspicion or the expectation of anyone that by permitting this dissemination of knowledge as to industrial purposes we might let out something that would be capable of being used for the destruction of mankind.

The gentleman from South Dakota, I think, is in error in undertaking to substitute the word "may" for "should." This is no more than a declaration of policy, "consistent with such policy" that is, the security of the United States, "the Commission shall be guided by the following principles." It does not say they shall do it or they shall not do it.

Then they say they will be guided generally by the following principles: "That information with respect to the use of atomic energy for industrial purposes should be" not may be, not will be, but should be "shared with other nations."

That means that it is an exemplification of a spirit of worldwide understanding and willingness to help to contribute to the welfare of other people in this world in order that we may lay the foundation of a permanent peace, and not rest our security altogether on armament or atomic bombs for the destruction of human lives.

Mr. MAY. Mr. Chairman, I move that the Committee do now rise.

The motion was agreed to.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr. JOHN J. DELANEY, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (S. 1717) for the development and control of atomic energy, had come to no resolution thereon.

FURTHER MESSAGE FROM THE SENATE

A further message from the Senate, by Mr. Koerber, its assistant enrolling clerk, announced that the Senate had passed without amendment a bill of the House of the following title:

H. R. 7052. An act to amend the Internal Revenue Code, and for other purposes.

The message also announced that the Senate had passed, with an amendment in which the concurrence of the House is requested, a bill of the House of the following title:

H. R. 6983. An act conferring jurisdiction upon the Court of Claims to hear, examine, adjudicate, and render judgment in any and all claims which the Confederated Salish and Kootenai Tribes of Indians of the Flathead Reservation in Montana, or any tribe or band thereof, may have against the United States, and for other purposes.

The message also announced that the Senate disagrees to the amendments of the House to the bill (S. 1236) entitled "An act to amend the Mineral Leasing Act of February 25, 1920, as amended, in order to promote the development of oil and gas on the public domain, and for other purposes; requests a conference with the House on the disagreeing votes of the two Houses thereon, and appoints Mr. O'MAHONEY, Mr. WAGNER, Mr. MURRAY, Mr. GURNEY, and Mr. ROBERTSON to be the conferees on the part of the Senate.

The message also announced that the Senate agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H. R. 4590) entitled "An act to authorize the use by industry of silver held or owned by the United States."

USE BY INDUSTRY OF SILVER HELD OR OWNED BY THE UNITED STATES

Mr. SPENCE submitted the following conference report and statement on the bill (H. R. 4590) to authorize the use by industry of silver held or owned by the United States:

CONFERENCE REPORT

The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H. R. 4590) to authorize the use by industry of silver held or owned by the United States, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendments of the Senate numbered 1 and 4, and the amendment of the Senate to the title of the bill, and agree to the same.

Amendment numbered 2: That the House recede from its disagreement to the amendment of the Senate numbered 2, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the Senate amendment insert the follow-

ing: "90.5"; and the Senate agree to the same.

Amendment numbered 3: That the House recede from its disagreement to the amendment of the Senate numbered 3, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the Senate amendment insert the following: "Provided further, That hereafter each United States coinage mint shall receive for coinage silver mined after July 1, 1946, from natural deposits in the United States or any place subject to the jurisdiction thereof, as provided in the Act of July 6, 1939 (Public Law 165, Seventy-sixth Congress), and tendered to such mint within one year after the month in which the ore from which it is derived was mined, except that the seigniorage to be deducted shall be 30 per centum instead of 45 per centum as provided in section 4 (b) of said Act"; and the Senate agree to the same.

BRENT SPENCE,
PAUL BROWN,
WRIGHT PATMAN,
JESSE P. WOLCOTT,

Managers on the Part of the House.

ROBERT F. WAGNER,
ALBEN W. BARKLEY,
ABE MURDOCK,
R. A. TAFT,
E. D. MILLIKIN,

Managers on the Part of the Senate.

STATEMENT

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H. R. 4590) to authorize the use by industry of silver held or owned by the United States, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommended in the accompanying conference report:

Amendment No. 1: This is a technical amendment inserting the word "hereafter" and is related to amendment No. 4 which eliminates the provision for an expiration date contained in the House bill. The House recedes.

Amendment No. 2: This amendment changed the minimum price at which Treasury silver may be sold under the bill from the 71.11 cents per ounce provided in the House bill to 90.3 cents per ounce. The House recedes with an amendment making the figure 90.5 cents per ounce. This change in the Senate figure is a technical change to make the figure conform with the policy agreed upon in connection with amendment No. 3.

Amendment No. 3: This amendment added a provision to the effect that in the case of silver mined after July 1, 1946, from natural deposits in the United States or any place subject to the jurisdiction thereof, and received by any United States coinage mint for coinage under the act of July 6, 1939 (Public Law 165, 79th Cong.), the seigniorage to be deducted under section 4 of said act shall be 30 percent instead of 45 percent as provided in such section 4. The House recedes with an amendment which restricts the application of this provision so that it will not apply unless the silver in question is tendered to the mint within one year after the month in which the ore from which the silver is derived was mined.

Amendment No. 4: This amendment struck out section 2 of the House bill, which provided that the act should expire two years after the date of its enactment. The House recedes.

The House recedes from its disagreement to the amendment of the Senate to the title of the bill.

BRENT SPENCE,
PAUL BROWN,
WRIGHT PATMAN,
JESSE P. WOLCOTT,

Managers on the Part of the House.

Mr. SPENCE. Mr. Speaker, I ask unanimous consent for the immediate consideration of the conference report on the bill (H. R. 4590) to authorize the use by industry of silver held or owned by the United States.

The SPEAKER. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

Mr. SPENCE. Mr. Speaker, I ask unanimous consent that the statement be read in lieu of the report.

The SPEAKER. Is their objection to the request of the gentleman from Kentucky?

There was no objection.

The Clerk read the statement.

The conference report was agreed to.

A motion to reconsider was laid on the table.

AMENDMENT OF FEDERAL CREDIT UNION ACT

Mr. SPENCE. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (H. R. 6372) to amend the Federal Credit Union Act, with a Senate amendment thereto, and concur in the Senate amendment.

The Clerk read the title of the bill.

The Clerk read the Senate amendment, as follows:

Page 3, after line 20, insert:

"Sec. 8. Subsection (b) of section 16 of such Act is amended to read as follows:

"(b) (1) The Governor may suspend or revoke the charter of any Federal credit union, or place the same in involuntary liquidation and appoint a liquidating agent therefor, upon his finding that the organization is bankrupt or insolvent or has violated any provisions of its charter, its bylaws, or of this chapter, or of any regulations issued thereunder.

"(2) The Governor, through such persons as he shall designate, may examine any Federal credit union in voluntary liquidation and, upon his finding that such voluntary liquidation is not being conducted in an orderly or efficient manner or in the best interests of its members, may terminate such voluntary liquidation and place such organization in involuntary liquidation and appoint a liquidating agent therefor.

"(3) Such liquidating agent shall have power and authority, subject to the control and supervision of the Governor and under such rules and regulations as the Governor may prescribe, (i) to receive and take possession of the books, records, assets, and property of every description of the Federal credit union in liquidation, to sell, enforce collection of, and liquidate all such assets and property, to compound all bad or doubtful debts, and to sue in his own name or in the name of the Federal credit union in liquidation, and defend such actions as may be brought against him as liquidating agent or against the Federal credit union; (ii) to receive, examine, and pass upon all claims against the Federal credit union in liquidation, including claims of members on shares; (iii) to make distribution and payment to creditors and members as their interests may appear; and (iv) to execute such documents and papers and to do such other acts and things which he may deem necessary or desirable to discharge his duties hereunder.

"(4) Subject to the control and supervision of the Governor and under such rules and regulations as the Governor may prescribe, the liquidating agent of a Federal credit union in involuntary liquidation shall (i) cause notice to be given to creditors and members to present their claims and make legal proof thereof, which notice shall be

published once a week in each of three successive weeks in a newspaper of general circulation in each county in which the Federal credit union in liquidation maintained an office or branch for the transaction of business on the date it ceased unrestricted operations: *Provided*, That whenever the aggregate book value of the assets and property of a Federal credit union in involuntary liquidation is less than \$1,000, unless the Governor shall find that its books and records do not contain a true and accurate record of its liabilities, he shall declare such Federal credit union in liquidation to be a "no publication" liquidation, and publication of notice to creditors and members shall not be required in such case; (ii) from time to time, make a ratable dividend on all such claims as may have been proved to his satisfaction or adjudicated in a court of competent jurisdiction and, after the assets of such organization have been liquidated, shall make further dividends on all claims previously proved or adjudicated; and the liquidating agent may accept in lieu of a formal proof of claim on behalf of any creditor or member the statement of any amount due to such creditor or member as shown on the books and records of the credit union: *Provided*, That all claims not filed before payment of the final dividend shall be barred and claims rejected or disallowed by the liquidating agent shall be likewise barred unless suit be instituted thereon within 3 months after notice of rejection or disallowance; (iii) in a "no publication" liquidation, determine from all sources available to him, and within the limits of available funds of the Federal credit union, the amounts due to creditors and members, and after 60 days shall have elapsed from the date of his appointment, shall distribute the funds of the Federal credit union to creditors and members ratably and as their interests may appear.

"(5) Upon certification by the liquidating agent in the case of an involuntary liquidation, and upon such proof as shall be satisfactory to the Governor in the case of a voluntary liquidation, that distribution has been made and that liquidation has been completed, as provided herein, the Governor shall cancel the charter of such Federal credit union: *Provided*, That the corporate existence of the Federal credit union shall continue for a period of 3 years from the date of such cancellation of its charter, during which period the liquidating agent, or his duly appointed successor, or such persons as the Governor shall designate, may act on behalf of the Federal credit union for the purpose of paying, satisfying, and discharging any existing liabilities or obligations, collecting and distributing its assets, and doing all other acts required to adjust and wind up its business and affairs, and it may sue and be sued in its corporate name.

"(b) After the expiration of 5 years from the date of cancellation of the charter of a Federal credit union the Governor may, in his discretion, destroy any or all books and records of such Federal credit union in his possession or under his control."

The SPEAKER. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

The Senate amendment was agreed to.

A motion to reconsider was laid on the table.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

Mr. THOMASON. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill (S. 1717) for the development and control of atomic energy.

The motion was agreed to.

Accordingly the House resolved itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill S. 1717, with Mr. JOHN J. DELANEY in the chair.

The Clerk read the title of the bill.

The CHAIRMAN. The Chair recognizes the gentleman from Massachusetts [Mr. BATES].

Mr. BATES of Massachusetts. Mr. Chairman, I rise in support of the amendment offered by the gentleman from Ohio [Mr. ELSTON].

As I stated yesterday on the floor of the House, under the conditions existing throughout the world today things are too uncertain to permit the changing of the present status and control of the administration of the atomic bomb and everything connected with nuclear energy. I think we ought to give the United Nations an opportunity to hold their peace parley the latter part of this month and see if we cannot find some way by which we can establish a basis for a permanent peace in the world. Surely with the unsettled conditions existing today, this is no time for us to disseminate information of any kind on the atomic front or nuclear energy. In today's paper we read of the War Department firing five physicists from the Aberdeen Proving Ground, where they were employed in very responsible positions, it is said that they were discharged on the ground that they were carrying on subversive activities. Yet, by this bill we are building up another organization, taking the control away from the War Department which is now working very closely with our scientists and has been over the period of the war years. It is through this organization that the War Department has thus created this tremendous weapon with all of its power has been fully developed.

Mr. Chairman, I do not blame the House for being in confusion. Over a period of 3 days we have been discussing this bill. Already several amendments have been offered and agreed to. There seems to be a complete misunderstanding on the part of many of us as to how far-reaching the provisions of this bill are, and we should go slowly.

Let me read briefly a report placed in the CONGRESSIONAL RECORD yesterday by the gentleman from Ohio [Mr. BENDER]. It is an article given to the press by Mr. Paul Bellamy, editor of the Cleveland Plain Dealer, who was one of those editors of American papers who visited Europe at the request of the War Department to make a first-hand, on-the-job inspection of what is going on there. He said:

I have just returned from a trip to hell. Would that I had the tongue of men and of angels to describe what I saw.

Dante should return and rewrite his description of the inferno.

By hell I mean postwar Germany and general conditions in central Europe.

Then he went on to speak about the Russians not cooperating. He said:

I believe the Russian problem is paramount in Europe. Everywhere one turns he finds that our commanding officers in the various zones, regions, and even county and municipal governments, have to keep an eye on the Russians. Everything we do has to be measured a little bit by its effect on the

ever-present Russian influence in Europe. And the Russians are not cooperating, not a single whit, with the other occupying powers in Germany. They are running their own show blithely and confidently and sometimes in an openly insulting manner.

Mr. Chairman, they are not cooperating in any other part of the world. They are operating behind the iron door in Central Europe where no one is permitted to visit the area under their control. They are operating secretly and conniving in Korea. We know the difficulty that is existing in the Manchuria area, where there is no cooperation and no mutual understanding and where civil war continues between the Chinese Nationalist troops and the Chinese Communists who are aided and supported by the Russians.

There should be no haste in changing the status of control of the atom bomb or nuclear energy while the world is still in an upheaval. No one can definitely forecast whether there will be further trouble ahead or whether the statesmen of the world will finally see the light, and find some way to establish permanent and lasting peace.

The War Department and the scientists of the country are working very closely together in further research on atomic energy. Today papers inform us that a huge atomic research center is being planned by the War Department and that nine major universities are cooperating in a project, the projected size of which can be seen in the board of regents, Columbia University, statement that the estimated expenditure may exceed \$5,000,000 a year. Such a statement assures us that research work on the development of nuclear physics is continuing with speed and is now in good hands.

Let us keep things in this field of activity just as they are, and until things become more settled throughout the world.

The CHAIRMAN. The time of the gentleman from Massachusetts [Mr. BATES] has expired.

All time has expired.

The question recurs on the perfecting amendment offered by the gentleman from South Dakota [Mr. CASE].

Mr. CASE of South Dakota. Mr. Chairman, I ask unanimous consent that the amendment may again be reported.

The CHAIRMAN. Without objection, the Clerk will again report the amendment.

There being no objection, the Clerk again reported the amendment offered by the gentleman from South Dakota [Mr. CASE].

Mr. HARNESS of Indiana. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. HARNESS of Indiana. I would like to have the Chair advise the House if this perfecting amendment is adopted, then the vote would recur on the amendment offered by the gentleman from Ohio [Mr. ELSTON] to strike out the section?

The CHAIRMAN. The gentleman is correct.

The question is on the amendment offered by the gentleman from South Dakota [Mr. CASE].

The question was taken; and on a division (demanded by Mr. CASE of South Dakota) there were—ayes 66, noes 57.

So the amendment was agreed to.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Ohio [Mr. ELSTON].

The question was taken; and the Chair being in doubt, on a division there were—ayes 79, noes 70.

Mr. THOMASON. Mr. Chairman, I demand tellers.

Tellers were ordered, and the Chair appointed as tellers Mr. ELSTON and Mr. THOMASON.

The Committee again divided; and the tellers reported that there were—ayes 99, noes 94.

So the amendment was agreed to.

Mr. HARNESS of Indiana. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. HARNESS of Indiana: On page 31, lines 4 to 8, inclusive, strike out all of subsection (b) of section 10.

Mr. HARNESS of Indiana. Mr. Chairman, the amendment I have offered seeks to strike from the bill the following language on page 31:

Dissemination. The Commission is authorized and directed to establish such information services, publications, libraries, and other registers of available information as it may deem necessary or desirable to provide for the dissemination of information in accordance with subsection (a).

That language would authorize and direct the Commission to set up the biggest propaganda agency ever created by the Congress. It could become a super OWI and I do not think that is necessary in carrying out the policies enumerated in subsection (a). I hope my amendment will be agreed to.

Mr. JENNINGS. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield to the gentleman from Tennessee.

Mr. JENNINGS. Under that provision could they not set up a bureau far broader, nationally and internationally, than anything to date and load the Federal pay roll down with crackpots and people who are favor of giving this country away and turning over its means of defense to the enemies of our country?

Mr. HARNESS of Indiana. Of course, if they set up this agency, under the authority and direction of this bill, it could become one of the most dangerous agencies ever created by law. In fact, I know of no precedent for such action. Subsection (b) of section 7 requires the Commission to report to the President and Congress any industrial, commercial, or nonmilitary uses of fissionable material or atomic energy. This provision should be adequate for providing pertinent information to the country.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. HARNESS of Indiana. I yield to the gentleman from California.

Mr. JOHNSON of California. How is this any different than the dissemination of information by the State bureau of health, like we have in our State, telling how to avoid diseases, how to guard against communicable diseases, and all those things?

Mr. HARNESS of Indiana. I do not think the gentleman or this Congress

is ready to set up an agency that would have such tremendous and the sweeping powers that this Commission would have, to establish libraries, information services, publications, and to disseminate information some of which might be only remotely connected with the subject of atomic energy. The cost of such a bureau would be staggering. I hope the Committee will adopt this amendment.

The CHAIRMAN. The time of the gentleman from Indiana has expired.

Mr. JUDD. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I am sure everybody here including those on my side of the aisle will agree that I have not been profligate in voting for amendments to this bill. I have consistently voted against all amendments, except the Case perfecting amendment to the paragraph just voted out of the bill. But I am going to vote for this amendment because I cannot see any possible reason or useful purpose to be served by this subsection. Any information with respect to atomic energy which this Commission can properly and rightfully release will be eagerly and instantly gobbled up and published by all the scientific journals in our country and in the world. To direct the Commission to establish publications and libraries and propaganda agencies to make this information available to the people seems to me utterly unnecessary, when there are already thousands of journals and publications, scientific and industrial and popular, able and eager to do the job. We cannot justify this provision when it is not necessary and sets up one additional Government propaganda agency.

Therefore, I hope the amendment will be adopted.

Mr. HARNESS of Indiana. Mr. Chairman, will the gentleman yield?

Mr. JUDD. I yield to the gentleman from Indiana.

Mr. HARNESS of Indiana. I am glad that the gentleman emphasized that this is not only an authorization but a direction in law.

Mr. JUDD. That is right.

Mr. THOMASON. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, I am opposed to the amendment offered by the gentleman from Indiana, but I am very frank to say that I think it is sort of a futile thing for me or anybody else to oppose it in view of the adoption of the amendment offered by the gentleman from Ohio [Mr. ELSTON]. Judging from the last vote, it looks like isolationism is again in the saddle. I take it that most of you want no part in our international problems. Paragraph 1 of section 10 specifically provides that nothing shall be done in connection with the dissemination of scientific and technical information unless and until Congress, the representatives of the people, if you please, by resolution had declared that effective and enforceable international safeguards against the use of such energy for destructive purposes had been established. That is a condition precedent. That has to be done before we make a single move. But after the

American people, the owners and possessors of the atomic bomb, through their representatives in Congress and after due deliberation, say that the secret of the atomic bomb has been properly safeguarded, to then say to the people all over the world who are crying out for medical aid, calling out for this great marvelous discovery that will bring happiness and prosperity and, I hope, peace to the countless people of the world—to then say to them that we will not give it to them for that purpose, that we will just draw ourselves into a shell and say, "No, we are not going to share that even for industrial purposes; we will not help to reclaim the stricken lands of Europe and Asia; we will not share our medical secrets and the discovery of a remedy for cancer," and all of these other aids to mankind is beyond my comprehension.

Mr. HARNESS of Indiana. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Indiana.

Mr. HARNESS of Indiana. I would like to know if the gentleman does not agree with me whether under subsection (b) of section 7 on page 25, which requires the Commission to make a report to the President and to the Congress of all the information with respect to industrial, commercial, or nonmilitary use of atomic energy, it would not be sufficient, without setting up this agency and directing them to establish libraries and so forth.

Mr. THOMASON. I do not know about that, but I certainly do not want, by my vote, to say that I refuse to give nonmilitary aid to the other peoples of the world. We are not giving away the atomic bomb secret, a bomb that destroyed a whole city, and another bomb in the hands of somebody else could destroy this Capital and the whole beautiful city of Washington and the great city of New York. We have harnessed it and we should put it in safe custody through some kind of a commission. Certainly we have got to take care of it from a domestic standpoint before we reach into the international field. Everybody knows that the Germans were on their way to perfect it. The gentleman from Missouri [Mr. SHORT], who was with me when we visited the atrocity camps in Germany, knows that they were then in those underground factories working diligently to perfect the atomic bomb as soon as possible. We know that Russia and other countries are well on the way. We have to take care of the bomb domestically first. After we do that, surely some kind of international atomic commission can be set up to take care of the entire problem. When that is done, if we are to live in a peaceful world, our delegates to Paris on the 29th day of this month must be able to take back some hope to the people who perhaps think, "The United States are the only people that have the bomb, and they are experimenting with it out in the Pacific now and are going to have some more experiments. There is not much use in trying to arrive at peace terms, because they can blow us up any time they want to." We are not going to do anything of that kind but that is what some people probably think.

Speaking for myself, from the depths of a sincere conviction, I say that just as soon—and I pray that that day is quite soon—as we place under control the atomic bomb, we then can release this wonderful new discovery to the sick and the impoverished people of the world.

The CHAIRMAN. The time of the gentleman from Texas has expired.

Mr. THOMASON. Mr. Chairman, I ask unanimous consent to proceed for two additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Texas?

There was no objection.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Connecticut.

Mrs. LUCE. I also voted against No. 1 under section 10, but does not the gentleman feel that even though that section is stricken this bill contains provisions for our integrating the whole Commission with an international commission when it is formed, so that the very purpose of this section, although it is stricken, will nevertheless be fulfilled the minute the world is able to establish adequate safeguards?

Mr. THOMASON. The gentlewoman is absolutely correct because we have left in subsection (2) that the dissemination of scientific and technical information relating to atomic energy shall be permitted.

Mrs. LUCE. You would have to strike out subsection (2) before you could make it possible for us to prevent giving it away.

Mr. THOMASON. That is right. It is most unfortunate that the Elston amendment was adopted, if we are to try to make some contribution here today to the cause of world peace. That is the way I feel about it. I hope there will be a roll call on that amendment.

Mr. JUDD. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Minnesota.

Mr. JUDD. I agree with the gentleman in the hope there will be a roll call on the Elston amendment and that it will be defeated. I think it was most unfortunate that it was adopted, especially after modification by the Case amendment. However, the gentleman's remarks here have been against the Elston amendment rather than the Harness amendment. I still feel that the Harness amendment is good and will not have any of the terrible effects the gentleman has portrayed.

Mr. THOMASON. I have great respect for the opinion of my distinguished friend from Minnesota. I know how he feels about this bill, because he has spent a good many years abroad. He knows what the suffering and what the turmoil is in Asia and perhaps in Europe. I hope we go back to the Elston amendment. I repeat that as far as I am concerned, I do not think it is very material if this amendment is adopted. I have made these remarks to try to convey to you my own conviction on the subject and express the hope that we

will have a roll call in the House and defeat the Elston amendment.

Mr. VOORHIS of California. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I agree heartily with what the gentleman from Texas has just said, both as to the fact that the Harness amendment is not of great significance and as to the fact that the action of the House with regard to the Elston amendment is in my judgment very regrettable indeed.

Mr. FOLGER. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. I yield to the gentleman from North Carolina.

Mr. FOLGER. I call the attention of the gentleman to the fact that subsection (b) says that that shall be done in accordance with subsection (a), which protects against divulging any military secrets.

Mr. VOORHIS of California. Precisely. What I want to address myself to is the very realistic situation under which we are legislating today. I know that to base our action on hope that the so-called secret of the atomic bomb may be protection for America for longer than a few brief years is to practice self-deception and deception of the people. During that brief period while America retains her preeminence in this field—and I shall vote to prolong that period as long as we can—America has an opportunity to take leadership for the harnessing of this terrible force by international agreement which, to quote the bill, will give "enforceable international safeguards against the use of such energy for destructive purposes."

The official position of the United States Government as to how that can be accomplished is contained in the Baruch proposal to the United Nations Atomic Energy Commission. What does that proposal contain? The proposals it contains are the conditions under which America would share the peacetime benefits of atomic energy with other nations under the terms of this bill had the Elston amendment not been adopted or should that language go back in the bill. Perhaps as the gentlewoman from Connecticut suggests this would be the case under the bill anyway, but certainly it would be far better to restore the language stricken by the Elston amendment so as to make America's position quite clear and to make it accord with the clear vision expressed by the gentleman from North Carolina a short time ago. The terms of the Baruch proposal laid down the conditions under which America would say, "Yes, so far as the peacetime benefits of atomic energy are concerned, we intend to share those peacetime benefits on a reciprocal basis with other nations." The conditions that the Baruch proposal laid down are briefly as follows: That the nations of the world—the other nations of the world as well as ours—shall agree that an international authority in which this Nation as well as other nations shall have full participation, shall have the police power to enter every nation on this globe to see whether or not in that nation there are being possessed any atomic weapons or any fissionable material or whether there is

any plant manufacturing fissionable material or whether there is in that nation any plant for the production of such materials as could produce atomic weapons. More than that, America proposes that such an authority shall control and own any such fissionable material or facilities for the production of fissionable material which could be used to produce such weapons anywhere on this globe, including that dictatorship which now lives behind that iron curtain. Those are the conditions and the only conditions under which America proposes that there shall be any dissemination of this knowledge. But can we here say—and still pretend to be for peace—that even if such conditions for enforceable international safeguards against the possession of atomic weapons or the means of making them are achieved, still America will refuse to share the knowledge not of atomic weapons but of possible medical or industrial benefits of atomic energy? No. We cannot take such a position.

Mrs. LUCE. Does the gentleman believe that if this world authority is brought into being that they will be able to capture materials used for chemical and biological warfare and take them out, too, and will it also provide a way of getting the battleships and B-29's and B-17's?

Mr. VOORHIS of California. I am very much obliged to the gentlewoman for asking the question. I want to answer it. I will say to the gentlewoman from Connecticut, it might well be that having once established the supremacy of a law of peace over the right of any nation to possess one kind of weapon of mass destruction, we will have taken a step which might open the gateway through which we could march to reach peace along the very lines that she suggests.

Mrs. LUCE. If it can be done, I am for it.

Mr. VOORHIS of California. I know that, of course.

I believe it quite important that we recognize that the problem of peace is not confined to atomic weapons by any manner of means, if the nations would agree, but in controlling atomic weapons in the manner suggested by the United States the first step in all history toward enforceable means to peace will have been taken and other necessary steps will become infinitely easier.

(Mr. VOORHIS of California asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this amendment close in 5 minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

The CHAIRMAN. The Chair recognizes the gentleman from New York [Mr. TABER].

Mr. TABER. Mr. Chairman, I have not spoken on this bill up to now, but I have been terribly distressed about it. I think the passage of this bill is the greatest menace that could possibly be set up against the success of a peace conference. Unless we leave this situation in the hands of the military until

after the June 29 conference, we are giving up and turning over to a civilian commission a set-up where they can do a lot of things that would be out of control. This particular provision which is the subject of this amendment is a very dangerous thing.

One does not have to be an internationalist or an isolationist to understand those things, but one has to be an American, and has to think, and not be led astray by false prophets. The idea of setting up this kind of an information service and establishing all sorts of libraries and registers and all that sort of thing to get the stuff out before we have a definite, positive agreement on the part of the other countries to permit us to do the inspecting that we need to do to find out whether or not they are ready to comply with whatever agreement that may be made, that is necessary if we are going to have peace in the world in the days to come. We are not going to have peace unless we protect ourselves right here, and unless we let those people who represent us go into that conference with something to talk about.

I wish this House, instead of being led astray by false statements as to what folks are who take one position or another, would think this thing out and not go off half cocked. That is what I am afraid those who are supporting this legislation are doing. I wish we would think about it and not do something that is going to interfere with a lasting and stable peace.

The CHAIRMAN. The time of the gentleman from New York [Mr. TABER], has expired.

All time has expired.

The question is on the amendment offered by the gentleman from Indiana [Mr. HARNESS].

The question was taken; and on a division (demanded by Mr. HARNESS of Indiana) there were—ayes 80, noes 68.

So the amendment was agreed to.

Mr. SMITH of Virginia. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. SMITH of Virginia: Page 33 after, line 6, insert a new subsection as follows:

"(5) The Commission shall make no contract under sections 3 or 4; shall issue no license to any person nor employ any person until the Federal Bureau of Investigation shall have first made an investigation of the character and associations of such person and certified that the character of such contractor licensee or employee is such as not to endanger the common defense or security."

Mr. SMITH of Virginia. Mr. Chairman, I think this amendment speaks for itself. All the discussion here has hinged around the tremendously dangerous forces which are involved in this bill, and the necessity for seeing that our secrets are kept.

This amendment, which I hope the committee will accept, will provide that no one shall be employed by the Commission and no license shall be granted by the Commission to manufacture these dangerous engines until the FBI has certified that such persons have been investigated and are of such character as not to endanger the welfare or security of the United States.

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. SMITH of Virginia. I yield.

Mr. SHORT. This side of the Committee will accept the gentleman's amendment.

Mr. MAY. The Committee of course cannot accept that amendment. Under that amendment they would never employ anybody unless the Bureau of Investigation were expanded to a hundred thousand men to investigate them.

Mr. SMITH of Virginia. I have nothing further to say on that amendment, but I have 5 minutes time and I should like to devote the remainder of it to a discussion of an amendment I intend to offer following the fate of this one.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. SMITH of Virginia. Not at this moment.

Mr. VOORHIS of California. On the present amendment?

Mr. SMITH of Virginia. If I can get some more time, but I want to discuss the next amendment I wish to offer for fear I may not have sufficient time when it is offered.

Mr. VOORHIS of California. Mr. Chairman, I ask unanimous consent that the gentleman from Virginia may proceed for two additional minutes.

The CHAIRMAN. The gentleman's time has not expired. That request would not be in order until his time had expired.

Mr. SMITH of Virginia. You will note on page 32 the provision for the punishment that shall be imposed for the violation of the terms of this act when it is done for the purpose of injuring the United States. That punishment is totally inadequate. If you will read those lines you will find that a person can divulge these secrets and be guilty of treasonable conduct and escape with a fine of \$10. That is possible under this act.

I propose to offer amendments throughout which will place a minimum—a minimum—of a fine of not more than \$20,000 and imprisonment for not less than 10 nor more than 20 years.

I hope the committee will agree to it so we may have some protection against the violation of this act when it is done for treasonable purposes.

Mr. JENNINGS. Mr. Chairman, will the gentleman yield?

Mr. SMITH of Virginia. I yield.

Mr. JENNINGS. That would not be punishment enough for a man, be he red, pink, or punk, who would undertake to betray this country.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. SMITH of Virginia. I yield.

Mr. VOORHIS of California. I just want to say that I think the gentleman's amendment with regard to the FBI investigation is well taken. I also agree with the amendment he proposes to offer fixing minimum punishment.

Mr. CHELF. Mr. Chairman, will the gentleman yield?

Mr. SMITH of Virginia. I yield to the gentleman from Kentucky.

Mr. CHELF. Does not the gentleman feel that if anyone would divulge the secrets of this atomic energy that the

minimum penalty ought to be death? For instance, we have had here in a short time past during the war 1,700 documents classified "Secret" and "Top Secret" stolen from the office of the Secretary of State. What did they do? They did not even prosecute them.

Mr. SMITH of Virginia. I do not yield further.

I may say to the gentleman from Kentucky that I believe we ought not to pass a bill of this magnitude and let anybody guilty of treasonable conduct get away with a \$10 fine, which he may do as the bill now stands.

Mr. KEFAUVER. Mr. Chairman, will the gentleman yield?

Mr. SMITH of Virginia. I yield.

Mr. KEFAUVER. I am in sympathy with the gentleman's amendment regarding the FBI investigation, but suppose the FBI for some capricious reason which we cannot understand, of course—but suppose that should happen—

Mr. SMITH of Virginia. I will answer the gentleman's question.

Mr. KEFAUVER. Let me finish the question.

Mr. SMITH of Virginia. I think the gentleman has finished it. The FBI does not have the reputation of acting capriciously and I am sure no such instance would occur.

Mr. KEFAUVER. May I finish my inquiry? I do not think they have that reputation; I do not think they would.

Mr. SMITH of Virginia. What is the question?

Mr. KEFAUVER. The question is: If anyone wanted to appeal from the ruling of the FBI could they appeal under the Administrative Procedure Act?

Mr. SMITH of Virginia. No; I do not think they could.

Mr. KEFAUVER. The gentleman thinks there would be no appeal?

Mr. SMITH of Virginia. Under the amendment of this language they could not.

The CHAIRMAN. The time of the gentleman from Virginia has expired.

The question is on the amendment offered by the gentleman from Virginia.

The amendment was agreed to.

Mr. SMITH of Virginia. Mr. Chairman, I offer a further amendment.

The CHAIRMAN. If the Chair may suggest to the gentleman from Virginia, the gentleman from Texas [Mr. SUMNERS] has asked the Chair to recognize him to offer an amendment after the words the gentleman has just suggested.

Mr. SMITH of Virginia. I yield to the gentleman from Texas.

The CHAIRMAN. The Clerk will read the amendment.

The Clerk read as follows:

Amendment offered by Mr. SUMNERS of Texas: Page 32, line 2, after the words "punished by", insert the word "death or by."

Mr. SUMNERS of Texas. Mr. Chairman, I would like to have the attention of the members of the committee to this proposed amendment. It is very important, as I see it, from a number of angles. Under the head of "Restrictions" the restrictions include data concerning the manufacture or utilization of atomic weapons. Then it is provided that if a person who possesses knowledge of this matter in reference to atomic weapons

communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing with intent to injure the United States or with intent to secure advantage to any foreign nation, he shall be punished by a fine of not more than \$20,000 or not more than 20 years in the penitentiary or both. That is the penalty.

Now here is a person who possesses information with reference to these atomic bombs, the sort of thing we know about, these deadly things. If that person under this provision takes the information and gives it or sells it to an enemy of this country, then all we do to him is say "naughty, naughty" relatively. The maximum penalty which could be given him is 20 years in the penitentiary and a fine of \$20,000. I propose a maximum penalty of death.

Mr. SMITH of Virginia. Mr. Chairman, will the gentleman yield?

Mr. SUMNERS of Texas. I yield to the gentleman from Virginia.

Mr. SMITH of Virginia. I call the gentleman's attention to the fact that still under the amendment he has offered, a person who could do all of those things and yet escape with a fine of \$10. The reason I interrupt the gentleman is to ask if he will not change his amendment so as to make that punishment in the penitentiary a minimum of 10 years—not less than 10 years or more than 20?

Mr. SUMNERS of Texas. I will say to the gentleman that I have no objection to that. If this amendment is agreed to that detail can be worked out. I think this whole penalty provision ought to be reworked and I assume it will be in conference if my amendment is agreed to. If my amendment is agreed to then if a person does a minor thing he could be fined or imprisoned, according to the degree of his offense, and it would make it possible for a person who betrays his country, does a thing with regard to the atomic bomb for the purpose of hurting his nation or give advantage to another nation, to be executed. Without this amendment it would be possible for a traitor possessed of the knowledge to make it possible by his betrayal for this Capitol to be destroyed by a bomb, and all we could do under these circumstances would be to give him 20 years as the maximum.

Mr. JENNINGS. Mr. Chairman, will the gentleman yield?

Mr. SUMNERS of Texas. I yield to the gentleman from Tennessee.

Mr. JENNINGS. Does not the gentleman think he ought to adopt the suggestion offered by the gentleman from Virginia, because it is entirely possible that a jury might be composed of Russian subversives or Russian sympathizers. I do not know what happened out on the coast, but out there they acquitted a Russian spy.

Mr. SUMNERS of Texas. Yes. But this must be considered. If you put a minimum that is too high where the act ought not to be excused, but a jury might not want to be instrumental in the giving of a long prison term; the jury might not convict at all. You have no way to compel a jury to render a verdict of guilty. That is what you are up against. I agree that there should be

no spirit of tolerance or indulgence where a person possessed of information imparts that information with the purpose of injuring his country and imperiling the people, in fact the existence of whole cities. I am concerned about that type of criminal who would betray his country for money, perhaps imperil his nation for pay. Besides the psychological effect of this small general penalty would be bad. There is too much loose talk and loose acting with regard to this mightiest of all the agencies of destruction which at the moment we hold within the confines of our own knowledge. There are too many people doing their best to turn it loose, or what amounts to the same thing, attempt to deliver it into the custody of a so-called world government, nonexistent except on paper.

I do not know of any generation in all history which has brought upon itself a greater responsibility, a greater danger, a greater duty, than that which is now ours by reason of our having liberated this dynamic power, and now are in danger of being responsible for its being turned loose in a psychopathic world.

Whatever is done should be the result of deliberate, advised, cautious judgment. Whoever, to hurt this country or to aid its enemies, would turn loose this thing against his people should not be permitted to live. There is no punishment severe enough for such a person.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Texas [Mr. SUMNERS].

The amendment was agreed to.

Mr. MARTIN of Iowa. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. MARTIN of Iowa: On page 31, line 14, after the word "commission", insert the words "by unanimous vote."

Mr. MARTIN of Iowa. Mr. Chairman, my only purpose in offering this amendment is to add to the safeguard against the release of data from the classification "restricted data" that is covered in this section. I do not believe anyone would have any serious objection to requiring the unanimous vote of the Commission to remove data from the "restricted data" classification.

Mr. Chairman, I have no desire to offer any further argument in regard to the matter.

Mr. THOMASON. Mr. Chairman, those of us on this side do not oppose the amendment.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Iowa.

The amendment was agreed to.

Mr. SMITH of Virginia. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. SMITH of Virginia: Page 32, line 3, after the word "not", insert the words "less than 10 years or."

Mr. THOMASON. Mr. Chairman, in view of the adoption of the other amendment, those of us on this side have no objection.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Virginia.

The amendment was agreed to.

Mr. SMITH of Virginia. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, this language occurs probably 12 or 15 times throughout this bill, and it should be changed to conform to the amendment offered by the gentleman from Texas and the amendment I offered as we go along. I wonder if that could not be done by unanimous consent?

Mr. THOMASON. Mr. Chairman, it is agreeable to those of us on this side.

Mr. SHORT. We have no objection. Mr. Chairman.

Mr. SMITH of Virginia. Mr. Chairman, I ask unanimous consent that wherever that language occurs later on in the bill that it may be changed to conform to the amendment offered by the gentleman from Texas and the amendment offered by myself.

Mr. ELSTON. Mr. Chairman, reserving the right to object, does the gentleman mean in this section or throughout the entire bill?

Mr. SMITH of Virginia. Throughout the entire bill.

Mr. ELSTON. This section deals with offenses against the security of the country. There may be other places where the security of the Nation is not involved; it may be only offenses by reason of some regulation of the Commission.

Mr. SMITH of Virginia. What I am speaking of is where this identical language occurs throughout the bill, where it says that the act is done for the purpose of injuring the United States. That is the only place I have in mind.

Mr. SAVAGE. Mr. Chairman, further reserving the right to object, would the gentleman explain how this is going to read after it is engrossed? There are two or three amendments on this question.

Mr. SMITH of Virginia. It will read:

Upon conviction thereof, shall be punished by a fine of not more than \$20,000 or imprisonment for not less than 10 years or more than 20 years, or both.

Mr. SAVAGE. Is not the language "more than \$20,000" stricken out?

Mr. SMITH of Virginia. No; that remains.

(Mr. SMITH of Virginia asked and was given permission to revise and extend his remarks.)

The CHAIRMAN. Is there objection to the request of the gentleman from Virginia?

There was no objection.

Mr. DWORSHAK. Mr. Chairman, I move to strike out the last two words.

Mr. Chairman, before we leave this section dealing with information about atomic energy, I should like to direct your attention to some information which may have a more realistic aspect now. You will recall that, several weeks ago when the extension of the draft bill was before this body, the Members who were in favor of exempting the 18- and 19-year-old boys from the draft were assailed and condemned by many newspapers because we were told that exemption would destroy the entire military program. You probably have read some of the dispatches appearing in the publications and newspapers of our country during the past week.

I have here a page from the New York daily, PM, dated July 16. As I recall, that was one of the publications which contended a few weeks ago that 18- and 19-year-old boys should be sent abroad as members of our armies of occupation. Let me read you a brief excerpt from the editorial captioned "The betrayal of youth," appearing in PM Tuesday:

At the end of the war in Europe the venereal disease rate among American soldiers was seven and a half percent a year. At the end of April 1946 it had risen to over 20 percent. By the middle of June it had reached 26 percent—perhaps the highest in American military history. It is still rising. In some areas in Germany the rate is more than twice the present average—that is to say, close to 55 percent.

I continue to quote from that editorial:

The new troop replacements we have been sending for the armies of occupation are youngsters given the task of policing a beaten people without having first had the disciplining task of winning the victory. They are kids who have not yet cut their eye-teeth in the experience of living, and whom we send—raw and morally unprepared—into a situation where they are the lords of the earth.

Is it a great wonder, then, that they show themselves incapable of resisting either the Nazi doctrines or the rampant diseases?

The influential New York Times—which generally supported a teen-age draft—on July 14 published a dispatch from Lindesay Parrott dated Yokohama. It refers to the order issued by Lt. Gen. Robert L. Eichelberger, commander of Allied ground forces in Japan, who warned his soldiers that the increasing misconduct by American troops in their teens had reached the point of "endangering the mission of the occupation" and must be stopped at once. I quote from this special dispatch:

The release of General Eichelberger's letter officially confirmed what most correspondents have known for some time, that the new young draftee in Japan has exhibited qualities of juvenile delinquency and vandalism never demonstrated by the combat troops who fought the Southwest Pacific war.

Most of the crimes are committed by youthful soldiers—the average age of the army of occupation is 20.3 years old.

Conditions probably are aggravated by the fact that Japanese hesitate to make complaints against Americans and also because most military policemen who suppress such actions are green youngsters.

General Eichelberger concluded:

This condition, a result of assault, crime, and retaliation, is endangering the mission of the occupation and must be stopped at once.

Mr. Chairman, while we are discussing this important problem of protecting the people of our country and the entire world from the potential ravages of atomic energy and atomic bombs, is it not pertinent at this time to pause and consider whether the responsibility devolves not only upon the military authorities, but likewise upon this Congress, to determine whether this scourge of disease and crime shall destroy the youth of America?

Mr. SHORT. Mr. Chairman, will the gentleman yield?

Mr. DWORSHAK. I yield to the gentleman from Missouri.

Mr. SHORT. A few weeks ago I said in essence what the gentleman has quoted here, only to have opprobrium heaped upon my head, and abuse even from some of the Members of this body. I am placing in the RECORD tonight other quotations from military authorities, not only General Eichelberger but General McNarney.

Only a few days ago I asked General Eisenhower how the volunteer system was coming along. This morning I received a letter from Major General Person, the chief liaison officer between our committee and the War Department, informing me that the number of volunteers had jumped from 10,000 the first week of last month to more than 25,000 the last week of last month, and that more than 62,000 young men volunteered in the month of June.

Mr. DWORSHAK. I thank the gentleman. I am presenting this information at this time to emphasize the importance not only of seeking to protect the people of the entire world, but to recognize our primary responsibility. We should realize that while we apparently won a military victory over the Axis Powers, today we are confronted with the serious situation of protecting these teen-agers of our country.

Almost daily we receive reports of courts martial of young American soldiers in occupied zones. It is obvious there has been a complete break-down of our military discipline, which probably is aggravated by too much leisure time available to our armed forces. Possibly this is the result of having more personnel for this assignment than is necessary to do an efficient job.

Mr. Chairman, the American people are cooperating in bringing order out of chaos in the Pacific occupied areas and in Germany. They have been told by the military authorities that it was necessary to draft in peacetime 18- and 19-year-old boys to maintain our armed forces at required strength. Congress did compromise this issue by demanding that 18-year-olds be exempted and, notwithstanding the assurances which were given during the debate on the peacetime draft bill, the military authorities are sending youngsters abroad for foreign service, although it is apparent older and more mature personnel should be utilized. It is difficult to justify such policies when it is recognized that voluntary enlistments have reached 847,220 in the Army and 265,230 in the Navy, in addition to several thousands in the Marine Corps, since VJ-day.

It is a terrible indictment of our military program that we must jeopardize the health and the morals of our youth to satisfy the demands of those who police the occupied areas. Is Congress going to evade its responsibilities in meeting this challenge, or will this legislative body demand that our military leaders discharge their duties in a more efficient manner?

Some encouragement is provided in the belated recognition of many newspapers that there is justification for exempting teen-agers from the peacetime draft. If we are to maintain a strong military establishment, it will be necessary to give immediate considera-

tion to the problems called to our attention by General Eichelberger in Japan and General McNarney as head of our occupation forces in Germany.

It should be possible to protect the welfare of American youth in this post-war era if we make the maximum use of a professional Army. I have advocated, for many months, that pay scales in the military branch be increased to stimulate volunteer recruitment. Atomic energy constitutes a real menace to mankind, but so does the prevalence of disease and crime among our occupation forces. We must demand greater efficiency on the part of our military leadership.

The Clerk read as follows:

PATENTS AND INVENTIONS

SEC. 11. (a) Production and military utilization:

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any patent granted for any such invention or discovery is hereby revoked and just compensation shall be made therefor.

(2) No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(3) Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon shall file with the Commission a report containing a complete description thereof, unless such invention or discovery is described in an application for a patent filed in the Patent Office by such person within the time required for the filing of such report. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (A) The sixtieth day after the date of enactment of this act; (B) the sixtieth day after the completion of such invention or discovery; or (C) the sixtieth day after such person first discovers or first has reason to believe that such invention or discovery is useful in such production or utilization.

(b) Use of inventions for research: No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(c) Nonmilitary utilization:

(1) It shall be the duty of the Commission to declare any patent to be affected with the public interest if (A) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy; and (B) the licensing of such invention or discovery under this subsection is necessary to effectuate the policies and purposes of this act.

(2) Whenever any patent has been declared, pursuant to paragraph (1), to be affected with the public interest—

(A) The Commission is hereby licensed to use the invention or discovery covered by such patent in performing any of its powers under this act; and

(B) Any person to whom a license has been issued under section 7 is hereby licensed to use the invention or discovery covered by such patent to the extent such invention or discovery is used by him in carrying on the activities authorized by his license under section 7.

The owner of the patent shall be entitled to a reasonable royalty fee for any use of an invention or discovery licensed by this subsection. Such royalty fee may be agreed upon by such owner and the licensee, or in the absence of such agreement shall be determined by the Commission.

(3) No court shall have jurisdiction or power to stay, restrain, or otherwise enjoin the use of any invention or discovery by a licensee, to the extent that such use is licensed by paragraph (2) above, on the ground of infringement of any patent. If in any action for infringement against such licensee the court shall determine that the defendant is exercising such license, the measure of damages shall be the royalty fee determined pursuant to this section, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court. If no royalty fee has been determined, the court shall stay the proceeding until the royalty fee is determined pursuant to this section. If any such licensee shall fail to pay such royalty fee, the patentee may bring an action in any court of competent jurisdiction for such royalty fee, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court.

(d) Acquisition of patents: The Commission is authorized to purchase, or to take, requisition, or condemn, and make just compensation for, (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or patent application covering any such invention or discovery. The Commissioner of Patents shall notify the Commission of all applications for patents heretofore or hereafter filed which in his opinion disclose such inventions or discoveries and shall provide the Commission access to all such applications.

(e) Compensation awards; and royalties:

(1) Patent compensation board: The Commission shall designate a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications under this subsection.

(2) Eligibility:

(A) Any owner of a patent licensed under subsection (c) (2) or any licensee thereunder may make application to the Commission for the determination of a reasonable royalty fee in accordance with such procedures as it by regulation may establish.

(B) Any person seeking to obtain the just compensation provided in subsections (a), (b), or (d) shall make application therefor to the Commission in accordance with such procedures as it may by regulation establish.

(C) Any person making any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon who is not entitled to compensation therefor under subsection (a) and who has complied with subsection (a) (3) above may make application to the Commission for, and the Commission may grant an award.

(D) Any person making application under this subsection shall have the right to be represented by counsel.

(3) Standards:

(A) In determining such reasonable royalty fee, the Commission shall take into consideration any defense, general or spe-

cial, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, such patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and may consider the cost to the owner of the patent of developing such invention or discovery or acquiring such patent.

(B) In determining what constitutes just compensation under subsection (a), (b), or (d) above, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery, and may determine that such compensation be paid in periodic payments or in a lump sum.

(C) In determining the amount of any award under paragraph (2) (C) of this subsection, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery. Awards so made may be paid by the Commission in periodic payments or in a lump sum.

(4) Judicial review: Any person aggrieved by any determination of the Commission of an award or of a reasonable royalty fee may obtain a review of such determination in the Court of Appeals for the District of Columbia by filing in such court, within 30 days after notice of such determination, a written petition praying that such determination be set aside. A copy of such petition shall be forthwith served upon the Commission and thereupon the Commission shall file with the court a certified transcript of the entire record in the proceeding, including the findings and conclusions upon which the determination was based. Upon the filing of such transcript the court shall have exclusive jurisdiction upon the record certified to it to affirm the determination in its entirety or set it aside and remand it to the Commission for further proceedings. The findings of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. The court's judgment shall be final, subject, however, to review by the Supreme Court of the United States upon writ of certiorari on petition therefor under section 240 of the Judicial Code (U. S. C., title 28, sec. 347), by the Commission or any party to the court proceeding.

Mr. ELSTON. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. ELSTON: On page 34, strike out section 11.

Mr. LANHAM. Mr. Chairman, will the gentleman yield for a parliamentary inquiry?

Mr. ELSTON. I yield.

Mr. LANHAM. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. LANHAM. Mr. Chairman, I have an amendment in the nature of a substitute for section 11 which, of course, is a perfecting amendment. It is my understanding that the amendment could be offered and voted upon as a perfecting amendment before a vote is taken on the motion to strike out the section.

The CHAIRMAN. It can be, if the gentleman desires to offer such an amendment.

Mr. LANHAM. Mr. Chairman, I have the amendment at the Clerk's desk.

Mr. THOMASON. Mr. Chairman, will the gentleman yield?

Mr. ELSTON. I am glad to yield to the gentleman.

Mr. THOMASON. May I ask the gentleman from Illinois [Mr. ARENDS] and

the gentleman from Missouri [Mr. SHORT] whether we cannot reach some fair agreement as to a limitation of time on this section.

Mr. SHORT. The gentleman will find us both cooperative, sir.

Mr. THOMASON. Then, Mr. Chairman, I ask unanimous consent that debate on this section and all amendments thereto close in 30 minutes.

Mr. LANHAM. Mr. Chairman, reserving the right to object, it will be recalled that I spoke in general debate at some length with reference to what I conceive to be the effects of section 11. In presenting the substitute amendment for section 11, I should probably like to have a little more than 5 minutes in order to make a proper presentation. I would like probably 10 minutes.

Mr. THOMASON. May I say I am certainly not disposed toward cutting anyone off from having a fair amount of time.

Mr. LANHAM. I would like to have 10 minutes, Mr. Chairman.

Mr. THOMASON. If I amend my request to limit debate to 40 minutes, that will probably give the gentleman an extra 5 minutes. We are just trying to save time.

Mr. SHORT. None of us have any purpose or desire to limit debate unduly so far as anyone is concerned. But since the gentleman from Texas spoke on this section the day before yesterday and the gentleman from Illinois spoke yesterday, it seems to me they covered the ground pretty thoroughly at that time. I hope we can set a limit on debate.

Mr. LANHAM. May I say to the gentleman that I did not speak, however, in explanation of the details of the amendment I am going to offer as a substitute.

Mr. VOORHIS of California. Mr. Chairman, reserving the right to object, and I shall not object, in glancing around the Chamber I wonder whether I may be the only Member who is going to speak in defense of the provisions of the bill unless members of the committee intend to do so.

Mr. THOMASON. No; the gentleman from California will not be the only one.

Mr. Chairman, I ask unanimous consent that debate on this section and all amendments thereto close in 45 minutes and that the acting chairman of the committee have the last 5 minutes.

Mr. LANHAM. Mr. Chairman, reserving the right to object, is it the understanding that I will have 10 minutes to make an explanation of the substitute for the section?

Mr. THOMASON. If the gentleman from Texas asks unanimous consent to be given that additional time, I certainly shall not object. I hope it would not be setting a precedent.

Mr. LANHAM. I may not use all of it, but I would like to have that understanding connected with the request.

Mr. THOMASON. May I say to my colleague I would not object.

The CHAIRMAN. Is there objection to the request of the gentleman from Texas that debate on this section and all amendments thereto close in 45 minutes?

Mr. RANDOLPH. Reserving the right to object, Mr. Chairman, I do so to re-

quest of the committee if it is thought possible to finish the bill tonight. Are you driving to finish tonight?

Mr. THOMASON. We certainly will drive as fast as we can. I cannot commit the House or the committee on that.

Mr. Chairman, I move that all debate on this section and all amendments thereto be limited to 45 minutes, with the acting chairman, or somebody whom he may designate, to have the last 5 minutes.

The question was taken, and the motion was agreed to.

Mr. HINSHAW. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. HINSHAW. The time being limited to 45 minutes does not include the time of the gentleman from Ohio [Mr. ELSTON], does it?

The CHAIRMAN. The gentleman is correct. It does not include the time.

Each Member will be recognized for 3 minutes.

The gentleman from Ohio [Mr. ELSTON] is recognized for 5 minutes.

Mr. ELSTON. Mr. Chairman, if section 11 is permitted to remain in this bill, it will completely void our existing patent system. The only testimony presented to the Military Affairs Committee on this phase of the bill was by Mr. Conder C. Henry, who for 17 years was the chief examiner of patent applications in the United States Patent Office, and for 5 years was Assistant United States Patent Commissioner. In his appearance before our committee, Mr. Henry represented the American Bar Association and the House Committee on Patents, being a member of the committee's National Advisory Committee. As Assistant Commissioner of Patents during the war, Mr. Henry issued a large part of the security orders which were issued under the law in application for patents.

Mr. PRICE of Illinois. Will the gentleman tell us who Mr. Henry was employed by?

Mr. ELSTON. You can read the hearings and find that out.

You will note from his testimony that hundreds of inventions used on the Manhattan Project were made by private inventors. Yet the security of the Nation and the interests of the Government were fully safeguarded. Notwithstanding this demonstration of the adequacy of our present laws from the standpoint of security, we are asked to scrap a system upon which a great part of our industrial economy has been created. In its place it is urged that we adopt a system which is paralleled only by the patent laws of Soviet Russia. About the only difference is that in Soviet Russia an inventor may have his name placed in the Labor Book, which gives him a priority for a position as a scientific worker. Under this bill the inventor would receive whatever royalty fee might be awarded by the Patent Compensation Board consisting of two or more employees of the Commission. In making application for his royalty fee, the sponsors of this un-American system have magnanimously provided that an applicant for a patent may be represented by counsel. I have examined the hearings before the Senate

committee, which our committee was told need not be supplemented, and while I find that such persons as Mr. Harold L. Ickes, Mr. Henry Wallace, a radio commentator, and various and sundry professors and scientists were called as witnesses, only one person presuming to know anything about our patent laws appears to have testified. He made the statement that—

The provision of our Constitution for the granting of exclusive rights, which has served so admirably in the past, should be continued with respect to this new art, in order that the development thereof may not be hampered.

Mr. Chairman, I submit that section 11 of this bill violates both the spirit and the letter of the Constitution, as expressed in its due process of law provision, as well as in article I, section 8, clause 8, which provides:

The Congress shall have * * * power to promote the program of science and useful arts by securing for limited times for authors and inventors the exclusive right to their respective writings and discoveries.

In the minority view of the committee we have cited a number of Supreme Court decisions interpreting these constitutional provisions. Let me quote from just one of them, *Solomons v. U. S.* (137 U. S. 342, 346), in which the Court said:

The Government has no more power to appropriate a man's property invested in a patent than it has to take his property invested in real estate.

As a revolutionary departure from the present patent system, the bill provides in section 11 that inventions and discoveries in the following fields shall not in the future be patentable:

First. The production of fissionable material;

Second. The utilization of fissionable material or atomic energy for a military weapon;

Third. Inventions to the extent used in the conduct of research or development activities in the fields specified in section 3 of the bill.

With respect to each of the foregoing three fields any patent that has already been granted would be revoked in whole or in part, that is to the extent that any such invention or discovery is so used in these fields. Section 11 also provides that in the future no patent shall be granted for those three fields.

For removing patent protection in the field of the production of fissionable material and in the field of utilization of fissionable material or atomic energy for military weapon, the report of the Senate committee gives the following reasons:

The committee concluded that private patents can play no role in the field of activity reserved exclusively for the Government. For this reason and to eliminate risk of disclosure of restricted information, risk which would be certain to arise under normal patent procedure, the bill provides that invention and discovery in these fields shall not be patentable matter.

Heretofore inventions useful solely or largely for governmental purposes, as, for example, military weapons, have been the subject matter of patents. Some of the most important of such inventions

have been developed by independent inventors. It would be unwise to change a practice which for approximately 150 years has proven to be advantageous to the Government as well as to private inventors.

As to the reason for removing these inventions from the field of patentable subject matter given by the committee's report; namely, to eliminate risk of disclosure of restricted information such removal of the inventions from patentable subject matter is an inadequate and an ineffectual means for effectuating that purpose. The present law does that much more effectively. I refer to the act of October 6, 1917 (40 Stat. 934, U. S. C., title 35, sec. 42), which provides as follows:

Whenever the publication or disclosure of an invention by the granting of a patent might, in the opinion of the Commissioner of Patents, be detrimental to the public safety or defense he may order that the invention be kept secret and withhold the grant of a patent for such period or periods as in his opinion the national interest requires: *Provided*, That the invention disclosed in the application for said patent may be held abandoned upon it being established before or by the Commissioner that in violation of said order said invention has been published or disclosed or that an application for a patent therefor has been filed in a foreign country by the inventor or his assigns or legal representatives, without the consent or approval of the Commissioner of Patents.

When an applicant whose patent is withheld as herein provided and who faithfully obeys the order of the Commissioner of Patents above referred to shall tender his invention to the Government of the United States for its use, he shall, if and when he ultimately receives a patent, have the right to sue for compensation to begin from the date of the use of the invention by the Government: *Provided* That the Secretary of War or the Secretary of the Navy or the chief officer of any established defense agency of the United States, as the case may be, is authorized to enter into an agreement with the said applicant in full settlement and compromise for the damage accruing to him by reason of the order of secrecy, and for the use of the invention by the Government.

It is true that section 2 of the above quoted act makes no provision for secrecy during the times of peace, since it merely provides that the act "shall remain in force during the time when the United States is at war." It would seem far more effective, if it is desired to prevent premature disclosure, to do so by making the above quoted act effective at all times so far as the production of fissionable material and of the utilization of fissionable material for military weapons is concerned.

Section 11, in addition to providing as above stated, that patents already issued in these fields shall be revoked, further provides that where the invention has not been already patented, the inventor "shall file with the Commission a report containing a complete description thereof unless such invention is described in an application filed in the Patent Office by the inventor." It still further provides that, in case the report shall be filed within a specified time, the inventor may make application to the Commission for an award for his invention. Provision is made for a Patent Compensation Board to determine what such award shall be.

Such provision for an award would throw an almost insufferable burden upon the Patent Compensation Board. A person thinking he has possibly made an invention could disclose the same to the Board and seek an award without being under any expense in so doing. The Commission would, therefore, undoubtedly have a large number of impractical schemes submitted to it for consideration. The person submitting his alleged invention would have nothing to lose in case his invention is turned down. Moreover, past experience has shown that failure to appreciate an invention at the time it is made, or at any time soon thereafter, is quite likely to happen. The vast importance of such inventions as the telephone and the modern vacuum tube went without proper appreciation until long experience and development activities by private enterprise demonstrated their importance.

If a Patent Compensation Board has had to pass upon these and other inventions of major importance, such Board would undoubtedly have failed to recommend the very considerable awards which should have been due to the inventors. It would be far better and more equitable to allow the grant of the patent and leave to the future the determination of the amount of compensation to which the inventor is justly entitled. That is, let the Government, as at present, exercise eminent domain and pay just compensation for what it actually takes; and not engage in speculation as to whether the invention is or is not valuable, and if so, to what extent.

No good reason is seen for departing from our present patent system and adopting an "award" system akin to the practice in Russia. Such award would not be as satisfactory an incentive as the present patent grant and all too frequently would result in an award given where it is not deserved and being withheld where it is actually due.

The other field which section 11 would remove from patent protection is that of research. As to this section 11 (b) provides—

No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

The fields specified in section 3 in which no patents will be granted for use of inventions in the conduct of research and development are as follows:

(a) Nuclear processes;

(b) The theory of production of atomic energy including processes, materials and devices related to such production;

(c) Utilization of fissionable and radio-active materials for medical, biological, health, or military purposes or utilization of fissionable or radio-active materials and process entailed in the production of such material for all other purposes, including industrial uses; and

(d) The protection of health during research and production activities.

In view of the fact that atomic energy is defined to mean "all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation," the fields above specified practically include, in language at least, everything in the universe. As stated in the Secretary of State's report on the International Control of Atomic Energy "almost all sources of the energy used on earth come to us from the sunlight which this great atomic energy plant provides." Even if these fields are limited to man-made production of atomic energy, the provisions of the bill are entirely too sweeping.

As is well known, many important industries are engaged in the manufacture and sale of research instruments which are useful only, or to a large extent, in the conduct of research and development activities. The bill would provide that no patents would be granted in the future for such inventions and that patent protection already granted therefore would be revoked. No provision is made even for an award for inventions in these fields. The bill would thus place these highly important kinds of invention without the pale of patent protection without any protection whatsoever in the future; and would destroy the incentive of inventors and industry to spend time and money in the development and commercialization of instrumentalities indispensable in research and development work.

I wish to emphasize the fact that the taking away from patent owners the rights they now possess in the field of research and development and giving them to private enterprise, even to competitive enterprises, is not the Government's exercise of eminent domain for which just compensation should be made. On the contrary, it is depriving a person of his property without due process of law.

The CHAIRMAN. The time of the gentleman from Ohio has expired.

(Mr. ELSTON asked and was given permission to revise and extend his remarks.)

The CHAIRMAN. The gentleman from Iowa [Mr. MARTIN] is recognized. PATENT LEGISLATION SHOULD NOT BE INCLUDED AT PRESENT IN ATOMIC ENERGY CONTROL ACT

Mr. MARTIN of Iowa. Mr. Chairman, the patent provisions in section 11 of the McMahon bill, S. 1717, represent a complete departure from the fundamental and basic principles of the United States patent system. Such changes could be defended only on the grounds that the present system is unable to cope with the future. Such fears would appear to be groundless since other provisions of the bill are ample to protect the national safety and the public interest.

The fundamental or basic principles of our patent laws are grounded in the constitutional provision giving Congress the power to promote the progress of science and the useful arts and granting to inventors exclusive rights to their inventions for a limited time. Those basic principles have been almost universally recognized as of great importance, and have been emphasized by the Supreme Court in numerous decisions during the last 100 years. They were restated by the United States Supreme Court on Jan-

uary 8, 1945, in the *Glass Industry Case* (323 U. S. 415). Among those basic principles are:

First. The exclusive right granted by a patent for a limited time is merely the right to exclude others from making, using, or selling the patented invention. The patent gives no right to make, use, or sell the invention and any such right that the patentee may have is a common-law right in nowise dependent upon the patent laws. The right to exclude others is the exclusive right provided for by the Constitution and is distinctive of our patent system.

Second. Patents are property. Since patents are property they should receive the same protection as is given to other forms of property and any provision for compulsory sharing of that property with others, such as by compulsory licensing, is inimical to our system of private enterprise.

In considering proposals for revising our patent system such as is provided in section 11 of this bill, it is especially important that these two basic fundamental principles be borne in mind in order that, not even unwittingly, shall these distinct and beneficent features of our patent system be destroyed.

During the last 12 years there have been three major committees or commissions appointed under Government authority to make reports with respect to our patent system; namely, the Science Advisory Board Committee, which made its report in 1935; the Temporary National Economic Committee, which made its final report in 1941; and the National Patent Planning Commission, which made the first of its reports in 1943. Each of these committees issued warnings and made strong recommendations against any revolutionary changes in the patent system.

The Science Advisory Board Committee stated:

Modifications should be entered upon carefully without destroying any vital part of the structure.

And further that—

The patent system in the past has been one of the primary influences in shaping American industrial life, and it has assisted enormously in the development of the country * * *. Radical changes in such a system should, of course, not be undertaken without serious and careful consideration.

The Temporary National Economic Committee in its final report stated:

The Temporary National Economic Committee rejoices in the endless march of discovery, invention, and innovation which has made possible the relatively high level of living enjoyed in the United States.

The chairman of the Committee, Senator O'MAHONEY, gave out a statement in which he said:

(1) * * * inventors and business still need the protection and stimulation of patents.

(7) There was practically unanimous agreement among the witnesses that Congress, by the enactment of the patent law, has given this country a system far superior to that which exists in any other country.

The National Patent Planning Commission in its report stated:

This system has accomplished all that the framers of the Constitution intended. It is the only provision of the Government for the promotion of invention and discovery and is the basis upon which our entire industrial civilization rests.

It further stated that—

The basic principles of the present system should be preserved.

In April 1945, President Truman asked the Secretary of Commerce, Mr. Wallace, to undertake a study of the operation and effectiveness of the patent laws and their relation to the purposes of the antitrust laws and postwar economy, and to submit recommendations respecting legislative proposals. A patent survey committee appointed for that purpose has since then been busily engaged in undertaking the work laid out for it which, of course, embraces a consideration of proposals such as are found in section 11 of the present bill. No reason is apparent meanwhile for hasty action by Congress upon the vital patent questions involved.

Patent provisions should not be introduced in the bill unless there is an extreme urgency for so doing. Especially provisions which are of a revolutionary character should not be considered except after ample opportunity has been given for their careful consideration. Such drastic patent legislation should, of course, be referred to the congressional committees on patents, which are especially qualified to evaluate such provisions.

Other provisions of the bill by which the Commission is given authority to control all uses of fissionable material, including use not merely for military purposes, and for research and industrial purposes as well, render any further control through patents absolutely unnecessary.

For example, section 5, paragraph 2, vests in the Government ownership of all fissionable materials.

Section 5, paragraph 4, authorizes and directs the Commission to distribute fissionable material or atomic energy except under and in accordance with the license issued by the Commission authorizing such manufacture, production, export or utilization.

Section 7 (c) especially provides where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such licenses or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable materials or atomic energy which appears to have these results. Under these provisions the Commission is not merely authorized but it is directed to prevent any monopolistic practices in this art by refusing or revoking licenses to enter this field, even for industrial purposes by those abusing the license rights. Even the license, if granted, is

limited to 1 year. Certainly it clearly appears, therefore, that any necessity for special patent provisions is unnecessary.

Especially should no attempt be made to incorporate patent provisions in a law to further govern the use of atomic energy in the fields of research or of the utilization of fissionable or radio-active materials for medical, biological, or other industrial uses. Such uses are not materially different in kind from uses under patents granted nowadays for other classes of inventions. There is no necessity for patent legislation directed against the development of inventions in this new field of atomic energy. If subsequent experience indicates need in this field for special treatment other than elsewhere provided in the bill, Congress will be in a far better position to enact legislation than it is now when at best so much is pure speculation as to any probable necessity therefor.

The CHAIRMAN. The Chair recognizes the gentleman from Texas [Mr. LANHAM].

Mr. LANHAM. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. LANHAM: Pages 34, 35, 36, 37, 38, 39, 40. Strike out all of the patent provisions commencing with line 5 on page 34 down to and including line 18 on page 40 and substitute in lieu thereof the following:

"Sec. 11. (a) The Commission is authorized to purchase, for the manufacture or use by or for the United States Government, any and all rights in and to any invention or discovery, or application for patent or patents thereon, relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy.

(b) The Commission is authorized to condemn, and to determine and make just compensation for, any and all rights in and to any invention or discovery relating to research on or the production of fissionable materials or the utilization of fissionable materials or atomic energy that affects the national defense and security: *Provided, however,* That upon the determination by the Commission that the national defense or security is no longer involved, any and all rights in and to such invention or discovery shall revert to the owner, subject to a nonexclusive, irrevocable and nontransferable license in favor of the Government.

"(c) When any person who has made an invention or discovery relating to research on or the production of fissionable material, or the utilization of fissionable materials or atomic energy and shall have filed an application for a patent thereon and shall have tendered his invention or discovery to the Government of the United States for its use, he shall, if and when he ultimately receives a patent, have the right to sue for compensation as provided for in this section, such right to compensation to begin from the date of any use of the invention by the Government: *Provided,* That the Commission is authorized to enter into and effect an agreement with said applicant in full settlement and compromise for the use of his invention by the Government.

"(d) If any person is dissatisfied with the determination of the Commission as to just compensation, he may have his remedy by filing a suit in the United States District Court for the District of Columbia, if filed within 6 months after such determination; and such court, on notice to the Commission and other due procedures had, may

thereupon determine the amount of the compensation to be paid such person, as the facts in the case may appear: *Provided,* That in any such suit the United States may avail itself of any and all defenses, general and special, that might be pleaded by a defendant in an action for infringement, as set forth in title 60 of the revised statutes, or otherwise. Any final judgment rendered against the Commission under any provision of this section shall have like force and effect as a money judgment rendered against the United States by the Court of Claims in a suit in respect of which the United States has expressly agreed to be sued; and the amount of any such final judgment shall be paid out of any appropriation applicable to the case, if any such there be; and when no such appropriation exists, said judgment shall be paid in the same manner as judgments rendered by the Court of Claims in cases under its general jurisdiction.

"(c) Any party aggrieved by any final judgment in a proceeding under this section may appeal therefrom to the Court of Appeals of the District of Columbia, and upon such appeal said court shall have power to review said judgment and affirm, revoke, or modify the same as upon appeals in other actions at law.

"(f) Attorneys appointed by the Commission may appear for and represent the Commission before any Government agency or judicial tribunal with respect to any and all invention, patent, and research matters in which the Commission is involved.

"(g) Any person who has made, or hereafter makes, any invention or discovery utilizing fissionable materials or atomic energy designed or specially adapted for use as or in a military weapon, shall file with the Commission a report containing a complete description thereof. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (1) The sixtieth day after the date of enactment of this act; (2) The sixtieth day after completion of such invention or discovery; or (3) the sixtieth day after such person first discovers, or first has reason to believe that such invention or discovery is specially useful as or in such a weapon."

Mr. MARTIN of Iowa. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Iowa.

Mr. MARTIN of Iowa. Mr. Chairman, I am very anxious to hear a more complete discussion by the gentleman from Texas than he can give in his allotted time. I ask unanimous consent that my remarks may be inserted immediately following the remarks of the gentleman from Ohio [Mr. ELSTON], and that I may yield my time to the gentleman from Texas [Mr. LANHAM].

The CHAIRMAN. Is there objection to the request of the gentleman from Iowa?

There was no objection.

Mr. LANHAM. Mr. Chairman, I am just as much opposed to section 11 as the gentleman from Ohio who offered an amendment to strike it out. I spoke in general debate citing reasons why the adoption of section 11 as it appears in the bill would abolish our patent system upon which the progress of this country has depended.

The reason I am offering my amendment rather than supporting the one striking out the section is that if this bill should pass and go to the conference committee, that committee probably would reinsert section 11; then we would

have no option upon its return to this body except to vote for or against section 11.

Mr. Chairman, may I say that the amendment which I have offered has the approval of the gentleman who has been the adviser in patent matters in connection with atomic energy from the very beginning; it has the approval of the National Patent Council, the small manufacturers of this country; it has the approval of the patent section of the American Bar Association; it has the approval of the American Patent Law Association, and it will not in any way injure our patent system and its protection and promotion. It will give to this Commission in all fairness every right which it should receive.

In addition to the approval of those whom I have mentioned, I received on yesterday this letter from the president of the New York Patent Law Association.

He writes as follows:

THE NEW YORK,
PATENT LAW ASSOCIATION,
July 17, 1946.

Hon. FRITZ G. LANHAM,
House Office Building,
Washington, D. C.

Re: McMahon atomic energy bill.

DEAR SIR: It is generally believed that the field of atomic energy is destined to be one of great commercial and industrial importance, possibly competing with or supplanting coal, oil, gas or water power, in addition to its obvious military and international aspects.

It is of fundamental importance that the incentives to invention and practical development provided by our patent system should not be jettisoned in this new industrial field. Yet the pending McMahon bill, S. 1717, and its companion, H. R. 6179, which have never had the benefit of consideration by the Patents Committee of either the Senate or the House, would virtually abolish the patent system in this new field.

It is not commonly appreciated that these bills go far beyond the military and international aspects of atomic energy and include the entire industrial field—section 1 on policy includes all industrial and commercial phases of improving the public welfare and increasing the standard of living; section 7 giving the Government licensing power, covers all uses of atomic energy whether for military or for industrial purposes; the bill throughout refers not only to fissionable material such as used in the atomic bomb but also to atomic energy broadly, even though usable solely for industrial purposes.

Similarly the patent provisions limiting or abolishing patent rights are drawn to cover all aspects of atomic energy—section 11a relates to production and military utilization; section 11b refers to research; section 11c refers to nonmilitary utilization.

1. In the military field (where, under existing and time-tested law, there is no question that patents could not interfere with the activities of the Government or its contractors) the important incentives provided by patents are abolished by prohibiting the grant of all patent rights and substituting a system of awards to be made by a specially created Government board. This board, acting in advance of the event, would have no basis for determining value as does the Court of Claims which makes an award after the event; nor would this board have any basis for determining priority among rival claimants, as does the Patent Office under the patent system.

2. In the research and commercial fields important incentives of patents are abolished

by the institution of a system of compulsory licensing. The Congress has consistently and for many years rejected efforts to establish compulsory licensing of patents. The public interest underlying this policy is well understood by the Patent Committees of both the Senate and the House and applies to all industrial fields including that of atomic energy.

I urge on all the Members of the Congress that the patent provisions (sec. 11) of this bill should be deleted before its passage.

Very truly yours,

R. MORTON ADAMS,
President.

Mr. Chairman, I repeat that this amendment which I have offered as a substitute has the approval of those who are interested in our patent laws and our patent system and in the preservation of the privileges rightfully granted to inventors in the Constitution and that have been preserved by the legislative bodies of this Government since our Republic first began.

What does this amendment do that I have offered? It allows this Commission by purchase or by condemnation to acquire any patent that it needs or any application for patent or any invention that it needs. It provides that in case it acquires a patent and discovers after a while that it is not useful with reference to atomic energy, it can retain a non-exclusive, nontransferable license for the use of it and transfer the patent back to the owner. It is impossible to conceive, when a patent is first issued or first applied for, what the ramifications of its use and success may be during the 17 years that the patent exists. Certainly, the patent owner should not be forever deprived of the advantages of his patent in industry and in the activities of civil life, and there is no reason for the Commission to keep it beyond the time that it is useful for the purposes set forth in this bill.

It provides that, if the compensation that is awarded by the Commission is not adequate in the judgment of the patent owner, he may have his day in court to determine that, and that he may have, in the case of dissatisfaction, an appeal to the Court of Appeals in order that his proper compensation for the time his patent is used may be fixed. Surely, all that we want to do is to give this Commission the right to the use of the patents that it needs and the patents that it can make of service in the promotion of atomic energy.

The CHAIRMAN. The time of the gentleman from Texas has expired.

Mr. ARENDS. Mr. Chairman, my name is on the list for time. I ask unanimous consent that my time be given to the gentleman from Texas, who is so well acquainted and so conversant with the matter of patents.

The CHAIRMAN. Is there objection to the request of the gentleman from Illinois?

There was no objection.

Mr. LANHAM. Mr. Chairman, this amendment gives the Commission the right to acquire any patent that it may need, and it also preserves our patent system and does not permit compulsory licensing and the undermining and the abolishment of the incentives to American ingenuity and inventive genius upon

which the prosperity of our country has been founded.

Mr. SPRINGER. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Indiana.

Mr. SPRINGER. Under the gentleman's amendment, is there a provision that permits voluntary licensing?

Mr. LANHAM. The Government may acquire any patent. It may acquire by negotiation voluntary licensing from the patent owner, if that is what it wishes, or it may acquire his patent ownership outright, with the provision that for proper compensation it can use his patent while it is effective for the purposes of the act, and when no longer effective in that way in the opinion of the Commission it reverts to the owner in order that he may get the use that he should get, with a license retained by the Government.

Mr. JENNINGS. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Tennessee.

Mr. JENNINGS. It is fortunate, I think, for the House that we have among us a man with the ability and thorough and comprehensive knowledge of the patent laws of this country that the distinguished gentleman who is now addressing us has. I feel that we ought to go along with him on this amendment.

Mr. LANHAM. I thank the gentleman.

This is a detailed and technical matter. I have been on the Committee on Patents for more than 20 years. This section has been handled by a committee not familiar with it. You may take my word for it that, unless you want to abolish our patent system, unless you want to cripple and destroy the incentive for American ingenuity to give expression to itself in inventions that will promote the progress of our country, you should adopt this amendment, which the people interested in patents approve, and preserve this fundamental system of our Nation.

Mr. JUDD. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Minnesota.

Mr. JUDD. All the patents when they are granted are made available for persons to come and inspect. Under the gentleman's amendment would patents that were held by the Commission be open for public inspection and knowledge?

Mr. LANHAM. Provision is made for keeping secret those that are primarily useful for national defense. As a matter of fact, I am the author of the law that provides that. The War Department and the Navy Department have their own research counsel with reference to patents, who work with the Patent Commissioner and his office, and whatever they discover is kept secret if it should be.

Mr. JUDD. Those provisions would apply under the gentleman's amendment?

Mr. LANHAM. Those provisions would apply.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from California.

Mr. VOORHIS of California. But the holder of a patent or the person who applies for a patent would have to register that patent, would he not?

Mr. LANHAM. The Commission under this amendment may even take an application for a patent before the patent is ever granted. The Commission has the right to get an invention before it has ever reached the patent stage, from the standpoint of applications, or it may get inventions for which patents have not even been applied for.

Let us preserve our patent system and not adopt a section devised by some one unknown that would destroy and abolish the fundamental basis of our progress.

The CHAIRMAN. The Chair recognizes the gentleman from Idaho [Mr. WHITE].

Mr. WHITE. Mr. Chairman, we are dealing with one of the fundamental principles of our Government, the advancement of science. Anybody who reviews the history of the United States cannot fail to be impressed with what the advancement of science through the national patents policy has done for this country. If I were asked to state which building in this country houses the most important office of the Government, the office that is more responsible for the preeminent position attained by our Government among world powers, I would point to the Patent Office. I would go back to the invention of the cotton gin, the steamboat, steel, and all the inventions that have placed us in that preeminent position abreast of and ahead of the rest of the world. I subscribe to everything said by the gentleman from Texas who preceded me.

Let me read from a release from the National Patent Council, sent to the office of every Congressman:

"The McMahon atomic energy bill (S. 1717) reflects the blind arrogance of bureaucracy gone mad," declared John W. Anderson, spokesman for small business, today. "The bill would drive American inventive diligence underground. It would create a vast black market in dangerous atomic inventions. Secret agents of foreign governments would find United States inventors cringing from the harsh treatment threatened by their own Government. Fear and resentment would lead to secret deals in which alien agents would get the inventions for black cash."

I read further from this release:

"The patent provisions of this bill," he said, "are so totally un-American and unconstitutional that all industry was amazed and aroused last week to learn that the House Committee on Military Affairs had reported it out favorably in the face of violent protests from industry and others."

If there is anything we should be jealous of and if there is anything we should protect, it is the right of the individual citizen of this country to be rewarded for his inventive genius. We should foster the advancement of science by protecting the right of patenting inventions.

Mr. Chairman, I am in favor of the amendment.

The CHAIRMAN. The Chair recognizes the gentleman from California [Mr. HINSHAW].

Mr. HINSHAW. Mr. Chairman, in the event the amendment of the gentleman from Texas [Mr. LANHAM] is not agreed to, I have at the Clerk's desk an amendment at line 11, page 35, which adds the words before the period "and just compensation shall be made therefor." In items Nos. 1 and 2 on page 34, it is provided in each case that just compensation shall be made. In item 3, however, which does not refer to a patent but to a mere invention or discovery useful in the production of fissionable material, the discoverer or inventor is required to report to the Commission within 60 days giving a full description thereof but no reward whatsoever is provided in the text of the bill. It seems to me that must have been an oversight on the part of the Senate committee or on the part of the House committee. I trust that in the event the amendment proposed by the gentleman from Texas is not agreed to, the committee will agree to the insertion of the language I propose. I do not exactly see how you can, by law, force any man who has made a discovery or invention for which no patent application has been made, to disclose his discovery to the Commission if he does not want to, until he should perhaps attempt to put his discovery or invention into practice. Certainly, to attempt by law to force him to make disclosure without reward is carrying things pretty far into the nebulous realms. I wonder what starry-eyed dreamer wrote this provision in subsection (3).

The CHAIRMAN. The Chair recognizes the gentleman from North Carolina [Mr. FOLGER].

Mr. FOLGER. Mr. Chairman, it is rather difficult, in fact, impossible, to analyze the substitute amendment offered by the gentleman from Texas. I have felt in reading the provisions of section 11 that the ultimate purpose of all the provisions of that section were not to discourage inventive genius or to destroy patent provisions, but to recognize them as having a legitimate place in our economy and in the world as well and that that very provision is to encourage discovery and inventive genius and provide that compensation might be made. I apprehend that the framers of this section feel about the matter as I feel, that this is not something set up to be exploited by men in order to create discoveries and inventions which they may consider to be commercially advantageous to themselves. It is not a money-making proposition. It is something that is not going to be cornered by a few men. If atomic energy outside its military value amounts to as much as many of our people think it will, it is largely something that has been discovered and paid for by the people of the United States of America. I cannot understand why it is thought that the handling of this subject as it is handled in section 11 of the bill would have any effect upon the patent laws and rights of men in discoveries and inventions in this country.

The CHAIRMAN. The Chair recognizes the gentleman from Washington [Mr. SAVAGE].

Mr. SAVAGE. Mr. Chairman, the Constitution says that "the Congress has the right to promote the progress of sci-

ence and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

I, like the gentleman from North Carolina [Mr. FOLGER], want to point out that it was the American people who spent about \$2,000,000,000 for the discovery of atomic energy. I think the people have as much right to the control of this dangerous entity as any private corporation. I do not see that it affects our patent laws. This is an exception to the patent laws.

I also want to point out that many corporations in the United States are now destroying initiative when they hire workers. Before you can go on the pay roll you have to sign a statement that the patent on anything you invent while working for that company shall be the property of the corporation, and the man gets no compensation of any kind for the invention. They are destroying initiative themselves.

I think that may very well apply to atomic energy. A corporation that requires its employees to sign over to the corporation all patent rights on anything the employee might invent or discover will also require scientists in their employ to sign a waiver, then what becomes of your incentive? There is more incentive in the bill as it now is than there will be if either amendment is adopted. The bill as is would compensate an inventor, but if amended there will be no compensation for the inventor from anybody. If it is incentive you are after you had better kill these amendments.

I am opposed to both of the pending amendments, the one offered by the gentleman from Texas [Mr. LANHAM] and also the amendment to strike out the entire section 11. I think it is too dangerous to make public the records of atomic energy. I do not believe there is anything wrong with holding these secrets. If they are going to be kept secrets, let us not make public records in the Patent Office of inventions regarding atomic energy.

We, by our votes on these amendments, are going to place the control of these vital patents in the hands of the Government or in the hands of corporations. We cannot trust corporations with such vital secrets. I can still remember, and so can you, that Standard Oil, just prior to the war, made a deal with Hitler that if Hitler would keep the patents for synthetic gasoline out of this country Standard Oil would attempt to prevent the development of synthetic rubber in the United States. Hitler believed that if he could deprive us of rubber tires it would mean our defeat. You know how crucial the rubber situation became during the war and it is not entirely cleared up yet. Was the Standard Oil Co. thinking of the welfare of the country or was it thinking of a monopoly in the oil business? You know the answer to that one. Furthermore this happened at a time when the country's supply of crude oil was running low with less than a 20-year supply remaining.

What about the Anaconda Copper Co. whose officials were convicted of producing inferior copper wire for the American

soldiers to use on the battle fronts? How many men did that company kill? How would you like to turn the atomic bomb secrets over to that Garsson outfit which the Senate now has on the carpet? Too many people in Congress have profititis. They want some outfit to make a profit on everything but those same Members can seldom see the need for anything for the people.

This Seventy-ninth Congress is really doing a job for the country, this atomic bomb control bill is butchered up now about as bad as the OPA bill.

I hope these amendments will be defeated. I hope all the amendments that have been adopted here in the Committee of the Whole will be defeated when we report the bill back to the House. I do not want to see the control of atomic energy turned over to the Army nor to the corporations. I want to see the bill passed substantially as it came from the Senate.

The CHAIRMAN. The time of the gentleman from Washington has expired.

The Chair recognizes the gentleman from New York [Mr. GWINN] for 3 minutes.

Mr. GWINN of New York. Mr. Chairman, the debate has made clear that so long as we are at war or threatened with war the military secret of atomic bombing should remain exactly where it is.

The armed forces are better guardians of military secrets than any political commission. Treasonable conduct regarding a military secret is subject to immediate court martial. This need for top military secrecy takes precedence, therefore, for the time being over any consideration of peacetime use of atomic energy for industrial development. We hope that the tense international situation will change in 6 months. Until then, this bill should be recommitted to the Military Affairs Committee for further study.

When this atomic discovery is no longer a secret, and peace and international order are assured, and the nations of the world together turn to industrial, agricultural, and medical developments, there will be no need for a huge and intricate atomic commission like the one contemplated in S. 1717.

Government must probably register and license the use of atomic energy in the same way dangerous materials are licensed in many fields. For such a purpose there is no use for such a commission as proposed.

When the time comes for the industrial and agricultural and humanitarian uses of this energy, the accumulated knowledge should be made freely available to the mind and imagination of the inventive geniuses of our country. From these men will come the inventions and discoveries in the application of atomic energy in the next 20 years as the theoretical and technological discovery of it all came from them during the last 20 years. All this happened without Government control, supervision, or direction by such commissions as here proposed.

The Government could not have selected or subsidized or even guessed who the discoverers of this energy would be. Nor is it likely that a mere Government

commission in the next 20 years will contribute the most creative ideas in the further development of the scientific use of this energy. That impossible task is contemplated in this bill. It is totalitarianism. It is a rejection of our basic faith in the free human mind.

By comparison, government and its commissions and employees do not invent and discover. They suffer from a kind of intellectual sterility and bureaucratic incapacity for creative work of this kind. Why, then, should it be given control over what it cannot understand?

Even from the War and Navy Departments, having the greatest war plants in all the world, not one invention decisive in the success of modern warfare has come. The truly great discoveries and inventions have all come from individuals, many of them obscure, some of them even regarded as crack-pots; none of them subsidized.

The sad fact seems to be that a Government is more likely to prosecute than it is to promote the geniuses of discovery and invention. Mr. DeForest, the inventor of radio in America, was tried for 30 days in an effort to convict him for using the mails to sell stock on the representation that he had invented a machine to talk without the use of wires.

It is entirely contrary to experience to expect that Government commissions should be wise enough to own, explore, experiment, manufacture, promote, invent, subsidize and make scientific advances like Edison, Ford, Wright, DeForest, Blake, McCormick, Whitney, or the inventors of radar and electronics accomplished.

To sum up, the industrial development of this great Nation and the conversion of its industrial plants to war are so completely dependent upon the untrammelled exercise of the free mind and imagination of our citizens that we dare not depart from our traditional ways of doing things. American progress and world power are built upon the social and industrial benefits which a free nation has derived from inventors and workers not controlled by Government.

Thus, both for the sake of peace and for the sake of defense, we must stand firm in favor of freedom of action in the development even of this new device, if we are to be sure of maintaining our course in national development and in security of world affairs.

So, I shall vote to recommit the McMahon bill, S. 1717, for these reasons:

First, because the present status of world affairs does not warrant any action on behalf of the United States which would deprive this Nation of its supreme weapon of war. The guardianship of our secret war weapon must not be moved or disturbed.

Second, when peace and international order come, the outlawing entirely of the use of atomic weapons and the enforcement of the law by international police is the prerogative of the United Nations Security Council.

Finally, and above all, because I reject the very idea that any governmental or international commission shall have power to hamper, control or censor free men and their free science beyond the

mere licensing required in the use of such dangerous materials.

The CHAIRMAN. The time of the gentleman from New York has expired.

The Chair recognizes the gentleman from California [Mr. DOYLE].

(Mr. DOYLE asked and was given permission to revise and extend his remarks.)

PROPOSED AMENDMENT ENDANGERS NATIONAL SECURITY

Mr. DOYLE. Mr. Chairman, lest the House get the idea that all American industry is in favor of the gentleman's amendment, may I call attention to the fact that on yesterday I read two letters from the National Association of Manufacturers, one dated June 27 and one July 16, from their Patent Division.

I call your attention to the RECORD of yesterday, page 9849.

I repeat, you can read it. They there claim that while private enterprise should have more availability to this atomic energy, they admit that private enterprise is safeguarded by adequate licensing provisions by the Commission. In other words, that Nation-wide group of manufacturers recognizes that adequate licensing by the Commission is sound and necessary in the interests of national security and safety.

Mr. LANHAM. Mr. Chairman, will the gentleman yield?

Mr. DOYLE. No. I am sorry, I have only a few minutes; the gentleman has had 15.

Mr. Chairman, I wish to call attention to the fact that if you adopt this amendment you strike out all control by the United States Government of this most dangerous substance, for military purposes, unless it is acquired from the inventors by purchase or condemnation, after a military weapon is invented or patented. You wipe out all exclusive control at the source of this material by the United States Government, and turn it over to private speculation and control. You turn over to private parties the control of the source of this energy and control of the development of military weapons in the first instance. Yet we have already this day by other actions recognized it to be the most powerful element in history for destruction or for progress.

I am absolutely opposed to my Government being placed in second place, on account of any factor. Passing as we did a minute ago an amendment carrying the death penalty for revealing any of these secrets of this terrific atomic energy to a foreign government—yet we now propose by this amendment, to turn it over to the genius and the greed too, of all those elements in our population, to use and develop and produce as they wish, for purposes of monopoly and money profit, without the Federal Government's having any proper control or jurisdiction over it, even for war purposes unless it buys it. I say, that is fundamentally dangerous to our national security and safety.

Section 11 as now written in the bill and as passed by the Senate requires a license from the United States to use any invention or discovery which is useful

solely for military purposes. Is not this in the interests of our national security and safety? Yet the proposed amendment by the gentleman from Texas would leave wide open the field of inventing and developing military weapons with the atomic energy in them in private hands and control and force our Government to condemn by court action if necessary their acquisition for our own national defense.

If this statement by me is not a fact, then I invite you to call attention to where in the proposed amendment there is anything to the contrary.

Yes, we have spent over \$2,000,000,000 as taxpayers to develop it for our national security and safety—it won for us that very freedom—and now we propose by this amendment to turn it over to whosoever will to develop military weapons with, and then require our taxpayers to again spend millions to acquire these military machine inventions.

I repeat, that I invite the gentleman to point out if his amendment provides any sort of a limitation on the utmost freedom to develop atomic military weapons, or even bombs, without even the Government having a word to say, unless it condemns or otherwise acquires the invention or patent.

This amendment proposes to make billions of money for private gain at the expense of some of our national security and safety. It does it in effect, even though no Member of this House so intends, of course.

As for me on this far reaching issue of private gain versus maximum national safety and maximum progress of the human race, I choose to vote in favor of my Nation's welfare and security first, and leave money profit for monopolies out. We must this date make this choice.

No justification has yet been offered by proponents of the amendment as relates to the development of military weapons with atomic energy. They know there is no justification for leaving the invention and production of military weapons with atomic energy in private hands, so they stress that the Government can acquire by condemnation, through court action if necessary, any such development.

Nor does the amendment of the gentleman prohibit a private party inventing a military weapon with atomic energy from selling it to a foreign nation. It does authorize the United States Government to acquire it, but it does not undertake to compel an American inventor to offer to sell it to the United States first or at all. Under subdivision (g) of the proposed amendment it requires an inventor to disclose his invention to the Government the sixtieth day after he makes up his mind that his invention or discovery is especially useful as a military weapon. So, again, it places our Nation under the handicap of waiting up on an inventor to be willing to admit that he concludes he has a military weapon. It does not even give the Government a first option or right to purchase or acquire such invention for our national security.

Nor are any penalties proposed in the amendment of the gentleman. I can

readily understand why, I think. It is because the requirements upon any inventor under this amendment, even in the field of the invention of military weapons with atomic energy, are so indefinite and uncertain that no penalty clause would have much chance of application in a court of last resort.

Yes, an inventor in America, under the gentleman's proposal, could invent a military weapon with the atomic energy factor even more destructive than the Hiroshima bomb, he could legally sell it to a foreign nation who might then be a potential or actual enemy to our national security; he could still file a report within the 60 days' period as provided in the gentleman's amendment; he could pocket his filthy monetary gain thus had; and he would still be acting within the requirements of the gentleman's amendment as far as military weapons are concerned.

Remember, gentlemen, this amendment does not reserve unto the Government any prior option to purchase, nor does it require the inventor to first offer it to the United States Government before he does to anybody else—foreign nations included.

So, under the gentleman's amendment we could easily have an invention in the military field, with a sale to an international cartel or a foreign nation by the inventor prior to the date he files his 60-day report with the United States Government, after he makes up his mind it is worth millions to him as a military weapon. So also, it leaves the field of military weapons wide open for foreign spies and agents to deal and trade with the few in our nation who might place greed for gold above patriotism. Yes, an American could invent a most destructive military weapon, he could sell and transfer it to a foreign nation through a foreign agent in this country; the invention could be removed to foreign shores and the American then file his 60-day report as required, and the inventor not have violated any provision of the proposed amendment. But, as long as the amendment is designed to allow freedom and free enterprise in the field of atomic energy for military weapons, we certainly could not then complain if the American inventor got all the gold he could for it. This is the sort of freedom of action this amendment would allow, regardless of our national safety and security. I am opposed to it.

Now, the field of industrial purposes I have not discussed for others have already done so.

The CHAIRMAN. The time of the gentleman from California has expired.

The gentleman from Illinois [Mr. PRICE] is recognized for 3 minutes.

Mr. PRICE of Illinois. Mr. Chairman, the only witness we had before our committee during the consideration of section 11 of this bill was Mr. Henry, former Commissioner of Patents, who appeared in opposition to the amendment. Mr. Henry at the present time, however, is privately employed as patent attorney for the Radio Corp. of America.

Mr. LANHAM. Mr. Chairman, will the gentleman yield?

Mr. PRICE of Illinois. I yield to the gentleman from Texas.

Mr. LANHAM. He is also one of the advisory council to the House Committee on Patents and went before the gentleman's committee at the express wish and request of the Committee on Patents.

Mr. PRICE of Illinois. I recall, however, that Mr. Henry was very confused when we asked him whether he was appearing as a representative of the Committee on Patents.

The present Commissioner of Patents not only has approved this section of the bill but participated in the drafting of parts of the section. The patent provisions are included in order to give special treatment to carry out other provisions of the bill. The atomic energy patents with which this section will deal are divided into two groups.

Group 1 consists of patents on the production of fissionable material and atomic weapons. The bill completely removes these subjects from the patent field. Since the production of fissionable material and atomic weapons are a Government monopoly, there seemed no point in having private patents for activities which could not be privately conducted. If this provision were not made, the Government would have to file for patents on the bomb and all secret processes and equipment to prevent private patents on these inventions. By eliminating patents in this field of exclusive Government activity, important secrets will be more closely guarded than if it were necessary for them to go through the Patent Office. Financial incentives for inventions in these fields are nevertheless retained through awards to be made by the Commission. Express provision is made for judicial review if the inventor is dissatisfied with the award.

The second group is limited to patents covering devices utilizing atomic energy, for example, atomic power plants, atomic-propelled ships, and so forth. Here, patents are applied for and issued in the usual way to private inventors. The only new provision is that if a patentee refuses to license an important patent, the Commission is authorized to require a license to be issued in return for a reasonable royalty to the patentee. This provision carries out the intent of the bill that the benefits of atomic energy be made generally available, and is specifically warranted by the fact that all development patents in the atomic energy field will necessarily be founded upon the work done in the Government's \$2,000,000,000 project. Since the public has paid for a major part of these inventions the bill assures the public that the benefits of the inventions will be made generally available. If the patent holder is dissatisfied with the royalty, he is expressly granted judicial review. These provisions, as I stated at the beginning of my remarks, were approved by and in part drafted by the Commissioner of Patents.

(Mr. PRICE of Illinois asked and was given permission to revise and extend his remarks.)

The CHAIRMAN. The Chair recognizes the gentleman from Arizona [Mr. MURDOCK].

Mr. MURDOCK. Mr. Chairman, in 1937 one of the leading Members of this House rose solemnly in this well and declared that we ought to have a holiday on inventions. I think that in order to enforce such a holiday he meant to close the Patent Office. I took issue with him at the time, because I felt that you cannot put a damper on human ingenuity and the inventive spirit. However, I am going to take a slightly different attitude now because of changes occurring during the last 10 years. At that time the gentleman thought man had created some things he could not control. I do not know whether today he is sure of that fact or not, but I am afraid of it right now.

In reference to the matter of inventions that pertain to atomic weapons and the use of atomic energy, I feel we have something that is far too dangerous to leave too freely in human hands. For that reason I favor the provision in section 11 in this bill, and I am opposed to striking it out.

Mr. BIEMILLER. Mr. Chairman, will the gentleman yield?

Mr. MURDOCK. I yield to the gentleman from Wisconsin.

Mr. BIEMILLER. As I understand section 11 in S. 1717, it only prevents the functioning of the normal patent system on two items of development; that is fissionable material and atomic weapons. I am inclined to ask the question of this House: Are you sincere in talking about secrecy with reference to atomic weapons or do you want profits? If you are going to permit private individuals to get patents on atomic weapons, a complete description must be filed in the Patent Office. It is there available to anyone who wants to look at it. Any intelligent scientists or technologists will have the secret of every atomic weapon. As far as I am concerned, I am for keeping secrecy above profits.

Mr. MURDOCK. I thank the gentleman and agree with him. I favor safeguarding property rights, yet I want to remind you that we have already denied the prospector, the man who goes out into the West and finds uranium, the right to establish a claim on that property having the material which may be converted into atomic energy. I think we ought to do very much the same thing for the protection of our national security, the same thing in regard to personal property in ideas covering this dangerous material as well as the mineral that is in the ground from which the material can be made. For that reason, I am opposed to the amendment which would strike section 11 from this bill.

I have not only read the extensive hearings of the Senate Committee on Atomic Energy, but I attended some of the sessions and heard the statements made. I was impressed with the seriousness of the attitude of the scientists. They appeared to me to have a deep sense of social responsibility. They were fearful of the terribly destructive power of the thing which they have produced, but they were also conscious of the great benefits which it might afford humanity. Yet practically all of them emphasized that when you

produce atomic energy for peace you are at least 75 percent along the road of having it for war. That terribly significant fact makes it imperative that we must not permit atomic energy uncontrolled in private hands.

Mr. VOORHIS of California. Mr. Chairman, I am as susceptible as any Member of the House to an appeal for freedom, but the general purpose of this bill, if I understand it correctly, is to say that until we know what atomic energy is and will do, until we have established sufficient controls so as to enable mankind to live with it with safety, until we know the answer to some of the questions posed by the gentleman from Minnesota, Dr. JUDG, we cannot safely permit every private individual in the country to exercise unlimited freedom in handling, possessing, or patenting atomic energy.

The point has already been made that as soon as we permit anyone to patent fissionable material or weapons depending on atomic energy, the patent has to be registered and the description has to be given in such clear, exact, full, complete, and concise language that any person versed in the arts and professions can understand it. Those are the words of the patent law. Will that promote security?

Under the amendment offered by the gentleman from Texas, anyone could patent fissionable material itself and it would then be incumbent upon the commission to go out and recapture the patent after it had been issued if the Commission believed it important to security. It is impossible for the Commission to guess what is going to happen all over the country with regard to such development. I think it quite evident that to plead for national security on the one hand and to say that private individuals might patent atomic energy on the other, is utterly inconsistent. So if either of these amendments is adopted, the safety provisions of the bill, the control over the terrible dangers inherent in misuse of this energy, will be largely lost.

Now as to my second point, I recall that the gentleman from Ohio himself the other day inserted an amendment in order that he might be sure that any person applying for the use of some of this material for industrial purposes in the future might be guaranteed his opportunity to get it. The gentleman appealed for his amendment on the ground that denial by the Commission of the use of radioactive material might at some future time deprive a man of the opportunity to remain in business.

Please bear in mind that argument as we consider the far more serious possibility of some single private corporation gaining a patent on some absolutely vital key device for the application of atomic energy. Such a corporation, if protected by a patent, could quite conceivably control and deny access to whole segments of the business life of America to everyone else.

We are dealing with a power here before the House today which may well transform the entire economy of the United States, and I have no fear of taking my stand on these grounds: First, I think the bill as written is quite right in

refusing to allow the patentability of atomic energy itself, the very energy of the sun, for the development of which the American people as a whole have paid \$2,000,000,000 and which, by every principle, must always belong to all the people. Second, I think the bill is also altogether correct in charging the Commission with this duty, that if in the future a patent is taken on some application of atomic energy—if it happens that such an invention is made that would, for example, deprive every company or agency of this country that now furnishes power or heat or light to the people of the very foundation of its business—then, under those circumstances, the Commission should exercise its power to require compulsory licensing, at a fair royalty, of such a patent. Unless this provision is retained, there is every likelihood of more complete monopolistic power than the world has ever seen being built on the basis of patents on this basic energy. To adopt either of these amendments is to risk the taking over of the whole economy of America and put it in monopolistic hands, of one or two great corporations. I furthermore plead for this understanding, that in recent years it has not been necessarily true that patents have advanced the sciences, and the arts, and the industrial progress, but sometimes they have hampered it, and we have evidence of that in the cartel agreements based on some patents that have been during the war period so inimical to national defense.

Would the House want some private agency to hold a patent on the air we breathe? I believe not. But who is to say the basic energy of every piece of matter in this universe is any more a fit subject for private patent than the air? No, Mr. Chairman; these amendments are wrong, fundamentally wrong. I am against them. I support the patent sections of the Senate bill.

(Mr. VOORHIS of California asked and was given permission to revise and extend his remarks.)

The CHAIRMAN. The Chair recognizes the gentleman from Texas [Mr. THOMASON].

Mr. THOMASON. Mr. Chairman, my remarks will necessarily be very brief. I just want to make this observation. I am strong for the patent laws of this country, and I have great respect for the judgment of my colleague the gentleman from Texas [Mr. LANHAM]. But I have studied the provisions of this bill, and we are not dealing with ordinary patents. We are dealing with an extraordinary discovery. This Government has spent more than \$2,000,000,000 already on the discovery of atomic energy. It has untold millions of dollars invested in the Manhattan project and the Oak Ridge project, and only today they are having another big experiment out near where I live, in the white sands of New Mexico. We are dealing with the most destructive thing that has ever been known since the Supreme Architect of the Universe threw this old world together.

As I understand this bill, ordinary and usual patents are not affected. This Government, Uncle Sam, owns this discovery. It is our bomb. It is our

secret, and when the Commission wants to take over any patent, revoke any patent, take charge of any patent, they have to pay for it. There is to be just compensation just as if they were invoking condemnation proceedings for any other kind of property. It is a most unusual situation, the way I view it. If we were not dealing with this destructive agent, I would be in sympathy with the views of my colleague from Texas. This terrible weapon is and must be, at least for a time, a Government monopoly.

That is all I have to say. It is Uncle Sam's secret. It is Uncle Sam's property now. The United States Government, acting through the Commission or the Army or the Navy, must control it. Of course, private industry would like to have a part in it, and they can under proper conditions. The provisions of the bill place no improper restrictions on private enterprise. If the bomb is to be kept a secret and if atomic energy is later to be developed for medical and industrial use, patents at least for the present should be kept exclusively in Government hands. We must take no chances. This amendment should be defeated.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Texas [Mr. LANHAM].

The question was taken; and the Chair being in doubt, the Committee divided, and there were—ayes, 121, noes 57.

So the amendment was agreed to.

The Clerk read as follows:

GENERAL AUTHORITY

SEC. 12. (a) In the performance of its functions the Commission is authorized to—
(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and by-product materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this act, or in the administration or enforcement of this act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony Act of February 11, 1893 (U. S. C., title 49, sec. 46), shall apply with respect to any individual who specifically claims such privilege. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) appoint and fix the compensation of such officers and employees as may be necessary to carry out the functions of the Commission. Such officers and employees shall be appointed in accordance with the civil-service laws and their compensation fixed in accordance with the Classification Act of 1923, as amended, except that to the extent the Commission deems such action necessary

to the discharge of its responsibilities, personnel may be employed and their compensation fixed without regard to such laws. Attorneys appointed under this paragraph may appear for and represent the Commission in any case in any court. The Commission shall make adequate provision for administrative review of any determination to dismiss any employee;

(5) acquire such materials, property, equipment, and facilities, establish or construct such buildings and facilities, and modify such buildings and facilities from time to time as it may deem necessary, and construct, acquire, provide, or arrange for such facilities and services (at project sites where such facilities and services are not available) for the housing, health, safety, welfare, and recreation of personnel employed by the Commission as it may deem necessary;

(6) with the consent of the agency concerned, utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this act;

(8) contract for the expenditure of funds for the purposes specified in section 10 (b) without regard to the provisions of section 87 of the act of January 12, 1895 (28 Stat. 622), and section 11 of the act of March 1, 1919 (40 Stat. 1270; U. S. C., title 44, sec. 111); and

(9) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) Security: The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

(c) Advisory committees: The members of the General Advisory Committee established pursuant to section 2 (b) and the members of advisory boards established pursuant to subsection (a) (1) of this section may serve as such without regard to the provisions of sections 169 and 113 of the Criminal Code (18 U. S. C., secs. 198 and 203) or section 19 (e) of the Contract Settlement Act of 1944, except insofar as such sections may prohibit any such member from receiving compensation in respect of any particular matter which directly involves the Commission or in which the Commission is directly interested.

Mr. THOMASON. Mr. Chairman, I move that the Committee do now rise.

The motion was agreed to.

Accordingly the Committee rose; and the Speaker having resumed the Chair, Mr. GORE, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (S. 1717) for the development and control of atomic energy, had come to no resolution thereon.

TREASURY AND POST OFFICE DEPARTMENT'S APPROPRIATION BILL, 1947

Mr. O'NEAL submitted the following conference report and statement on the bill (H. R. 5452) making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1947, and for other purposes:

CONFERENCE REPORT

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate numbered 7 to the bill (H. R. 5452) making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1947, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

Amendment numbered 7: That the House recede from its disagreement to the amendment of the Senate numbered 7, and agree to the same with an amendment, as follows: Omit the matter stricken out and inserted by said amendment; and the Senate agree to the same.

EMMET O'NEAL,
HERMAN P. KOPPLEMANN,
CLARENCE CANNON,
THOMAS D'ALESSANDRO, Jr.,
JOHN TABER,
GORDON CANFIELD,

Managers on the Part of the House.

KENNETH MCKELLAR,
PAT MCCARRAN,
CARL HAYDEN,
THEODORE FRANCIS GREEN,
WALLACE H. WHITE, Jr.,
CHAN GURNEY,
CLYDE M. REED,

Managers on the Part of the Senate.

STATEMENT

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H. R. 5452) making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1947, and for other purposes, submit the following report in explanation of the effect of the action agreed upon and recommended in the accompanying conference report as to such amendment:

TREASURY DEPARTMENT

Amendment No. 7. Eliminates language proposing amendments to the Silver Purchase Act, the repeal of the transactions tax on silver bullion and prohibiting ceiling prices on silver and silver products.

EMMET O'NEAL,
HERMAN P. KOPPLEMANN,
CLARENCE CANNON,
THOMAS D'ALESSANDRO, Jr.,
JOHN TABER,
GORDON CANFIELD,

Managers on the Part of the House.

Mr. O'NEAL. Mr. Speaker, I ask unanimous consent for the immediate consideration of the conference report on the bill H. R. 5452.

The SPEAKER. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

The Clerk read the conference report.

Mr. O'NEAL. Mr. Speaker, I move the previous question on the conference report.

The previous question was ordered.

The conference report was agreed to. A motion to reconsider was laid on the table.

DEPARTMENT OF LABOR AND FEDERAL SECURITY AGENCY APPROPRIATIONS, 1947—CONFERENCE REPORT

Mr. HARE submitted the following conference report and statement on the bill (H. R. 6739) making appropriations for the Department of Labor, Federal Security Agency, and related independent agencies for the fiscal year ending June 30, 1947, and for other purposes:

CONFERENCE REPORT

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate numbered 39 to the bill (H. R. 6739) making appropriations for the Department of Labor, the Federal Security Agency, and related independent agencies, for the fiscal year ending June 30, 1947, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

Amendment numbered 39: That the House recede from its disagreement to the amendment of the Senate numbered 39, and agree to the same with an amendment as follows: In lieu of the matter stricken out by said amendment insert the following: "Provided further, That no part of the funds appropriated in this title shall be available to organize or assist in organizing agricultural laborers, or used in connection with investigations, hearings, directives, or orders concerning bargaining units composed of agricultural laborers as referred to in section 2 (3) of the Act of July 5, 1935 (49 Stat. 450), and as defined in section 3 (f) of the Act of June 25, 1938 (52 Stat. 1060)"; and the Senate agree to the same.

BUTLER B. HARE,
MATTHEW M. NEELY,
FRANK B. KEEFE,
H. CARL ANDERSEN,

Managers on the Part of the House.

PAT MCCARRAN,
KENNETH MCKELLAR,
JOSEPH H. BALL,
WALLACE H. WHITE, Jr.,
STYLES BRIDGES
(By J. H. B.),

Managers on the Part of the Senate.

STATEMENT

The managers on the part of the House at the conference of the disagreeing votes of the two Houses on amendment No. 39 of the Senate to the bill (H. R. 6739) making appropriations for the Department of Labor, the Federal Security Agency, and related independent agencies, for the fiscal year 1947, and for other purposes, submit the following statement in explanation of the action agreed upon by the conferees and recommended in the accompanying conference report:

The language agreed upon by the conferees differs from the original House language by preventing the use of any funds appropriated to the National Labor Relations Board for the purpose of organizing or assisting in organizing agricultural laborers, and further provides that the definition of "agricultural labor" as applied to the inhibition on the expenditure of funds for any hearings, investigation, directives, or orders by the National Labor Relations Board for collective-bargaining units composed of agricultural laborers shall be the definition contained in the Fair Labor Standards Act instead of the definition contained in the Social Security Act as provided in the original House language.

BUTLER B. HARE,
MATTHEW M. NEELY,
FRANK B. KEEFE,
H. CARL ANDERSEN,

Managers on the Part of the House.

Mr. HARE. Mr. Speaker, I ask unanimous consent for the immediate consideration of the conference report on the bill (H. R. 6739) making appropriations for the Department of Labor, Federal Security Agency, and related independent agencies for the fiscal year ending June 30, 1947, and for other purposes.

The SPEAKER. Is there objection to the request of the gentleman from South Carolina?

There was no objection.

The Clerk read the report.

Mr. HARE. Mr. Speaker, I move the previous question on the conference report.

The previous question was ordered.

The conference report was agreed to.

A motion to reconsider was laid on the table.

UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION

Mr. BLOOM. Mr. Speaker, I ask unanimous consent to take from the Speaker's desk the joint resolution (H. J. Res. 305) entitled "Joint resolution providing for membership and participation by the United States in the United Nations Educational, Scientific, and Cultural Organization," and authorizing an appropriation therefor, with Senate amendments thereto, and concur in the Senate amendments.

The Clerk read the title of the joint resolution.

The Clerk read the Senate amendments, as follows:

Page 2, lines 11 and 12, strike out "and must have been such for at least fifteen years."

Page 3, line 9, after "Cooperation", insert "of not to exceed one hundred members."

Page 3, line 9, strike out after "Cooperation." over to and including "States." in line 3, page 4, and insert "Such Commission shall be appointed by the Secretary of State and shall consist of (a) not more than sixty representatives of principal national, voluntary organizations interested in educational, scientific, and cultural matters; and (b) not more than forty outstanding persons selected by the Secretary of State, including not more than ten persons holding office under or employed by the Government of the United States, not more than fifteen representatives of the educational, scientific, and cultural interests of State and local governments, and not more than fifteen persons chosen at large. The Secretary of State is authorized to name in the first instance fifty of the principal national voluntary organizations, each of which shall be invited to designate one representative for appointment to the National Commission. Thereafter, the National Commission shall periodically review and, if deemed advisable, revise the list of such organizations designating representatives in order to achieve a desirable rotation among organizations represented."

Page 4, line 12, strike out "committee not exceeding fifteen persons" and insert "committee, and may designate such other committees as may prove necessary."

Page 4, line 15, strike out "it" and insert "them."

Page 5, lines 1 and 2, strike out "and must have been such for at least five years."

The SPEAKER. Is there objection to the request of the gentleman from New York?

Mr. MARTIN of Massachusetts. Mr. Speaker, reserving the right to object, will the gentleman explain the Senate amendments?

Mr. BLOOM. I took this matter up with the gentleman from New Hampshire [Mr. MERROW], who introduced the bill, who went over to London as your representative.

Mr. MARTIN of Massachusetts. But I would like to know a little bit about it also.

Mr. BLOOM. Well, they are simply perfecting amendments.

Mr. MARTIN of Massachusetts. Just what do the Senate amendments provide? What is the substance of them?

Mr. BLOOM. Two of the amendments remove an implication which the Senate felt to be unsound law. These amendments removed restrictions which provided that naturalized American citizens must have been naturalized at least 15 years before serving as representatives or alternates and at least 5 years before serving on the national commission. The Department of State had requested that these two provisions be eliminated and the Senate report supported the Department's thought that any law which implies that a native-born citizen is superior to a foreign-born citizen, or that a citizen naturalized for 15 years is better than one naturalized for 5 years, is unsound law.

Mr. MARTIN of Massachusetts. The Senate is not amending this bill just for the sake of amending it. It must have some purpose. Now, what were the amendments?

Mr. BLOOM. The third amendment, which has the approval of the State Department, relates to section 3 of the joint resolution. I believe that there will be no objection to the changes made by the Senate.

Mr. MARTIN of Massachusetts. I think we had better ask the gentleman to let this go over until tomorrow, until I have a chance to look over the amendments.

Mr. VORYS of Ohio. The gentleman from South Dakota [Mr. MUNDT] and the gentleman from Connecticut [Mr. RYTER] were the principal protagonists of amendments along this line. It seems to me that the changes which the Senate have made do not at all change the principles for which those gentlemen contended so ably before our committee. Am I not correct in that?

Mr. RYTER. Mr. Speaker, the principal change consists of the composition of this National Advisory Commission who are delegates to the UNESCO set-up. The House voted the original methods, which I had introduced, calling for the creation of this National Advisory Commission, to consist of representatives of the principal national educational, scientific, and cultural bodies in the United States. It took away from the Secretary of State the appointive power and left it to the selection of one or two individuals to be selected by this principal original organization. Originally the bill called for a body of 15, and allowed a certain amount of elasticity, so that thereafter this Commission might form the rules and regulations with reference to organizations interested in scientific and cultural matters. The Senate amendment places a ceiling of a hundred, but gives the principal private national organizations 60 of those 100 representatives, and divides the 40 amongst the other organizations upon a State and local basis. That amendment is agreeable to the proponents of the original amendment to the House version.

Mr. MARTIN of Massachusetts. The ordinary practice is that when legisla-

tion of this character is to be brought up, I should have an opportunity to look it over before unanimous consent is requested. When that is not done, I generally object until I have had that privilege.

Mr. RYTER. I trust that my explanation supplies the gentleman with the necessary information. If there are any other questions I will be glad to answer them.

Mr. MARTIN of Massachusetts. I think the gentleman should withdraw his request for the moment, and then we will see what we can do tomorrow.

Mr. McCORMACK. Mr. Speaker, will the gentleman yield?

Mr. MARTIN of Massachusetts. I yield.

Mr. McCORMACK. This experience best illustrates the wisdom of the policy that exists among the leadership. It is based upon courtesy. I know there is no intent to be discourteous, but the custom and the practice of consulting the leadership on both sides and the Speaker before unanimous-consent requests are made should be strictly adhered to. My remarks are not to be construed as criticism, but what has happened here best illustrates the situation. The gentleman from Massachusetts [Mr. MARTIN] is minority leader. I knew nothing about this myself. I assumed the gentleman from Massachusetts [Mr. MARTIN] had been consulted. It is also wise to consult with the members of the minority party, the ranking members, on the committee, to whom the minority leader looks for their suggestions or advice or guidance.

Mr. BLOOM. Mr. Speaker, let me say that I did not intend to bring this up this afternoon but the Committee of the Whole having risen as early as it did I thought it would facilitate matters to call it up. I had spoken to the gentleman before. I am sorry I did not consult the minority leader.

Mr. MARTIN of Massachusetts. We are approaching what we hope are the closing days of the session and there are likely to be many pieces of legislation called up by unanimous consent. If the gentleman from Massachusetts [Mr. McCORMACK] and myself do not have the opportunity of looking it over we are likely to let legislation go through that some of the membership did not expect would go through.

Mr. BLOOM. I will say to the gentleman that it is my mistake. I did not know there was going to be any controversy about it.

Mr. MARTIN of Massachusetts. There is no controversy about it as far as I know but we do not like the way it is called up without prior consultation.

The SPEAKER. Does the gentleman from New York withdraw his request?

Mr. BLOOM. Mr. Speaker, I withdraw the request.

HOOR OF MEETING TOMORROW

Mr. McCORMACK. Mr. Speaker, I ask unanimous consent that when the House adjourns today it adjourn to meet at 10 o'clock tomorrow.

The SPEAKER. Is there objection to the request of the gentleman from Massachusetts?

There was no objection.

26. RECLAMATION. Passed without amendment S. 2372, to authorize the construction of the Lewiston Orchards, Idaho, reclamation project (pp. 9726-7).
27. RESEARCH; ATOMIC ENERGY. Passed 265-79, with amendments S. 1717, the atomic-energy bill (pp. 9672-90).
28. PATENTS. Conferencees were appointed on H.R. 5223, to extend temporarily the time for filing applications for patents, and for action of the U.S. Patent Office with respect thereto (p. 9727).
29. PERSONNEL. Rep. Randolph, W.Va., inserted a Civil Service Committee subcommittee report on their investigation of the loyalty among Federal workers and employment practices within Government agencies (pp. 9728-30).
30. HEALTH. The Rules Committee reported a resolution for the consideration of S. 191, to amend the Public Health Service Act to authorize grants to States for surveying their hospitals and public health centers and for planning construction of additional facilities, and to authorize grants to assist in such construction (p. 9733).
31. LEGISLATIVE PROGRAM. Majority Leader McCormack announced the program for this week as follows: Mon., District day; Tues., the price-control conference report if one has been submitted, and the social security bill, H.R. 7037; Wed., Calendar Wednesday; Thurs., Consent and Private Calendars; and the LaFollete congressional-reorganization bill, a bill to establish three additional Assistant Secretaries of Commerce, and a bill to extend RFC will also be considered during the week (pp. 9727-8).
32. ADJOURNED until Mon., July 22 (p. 9732).

SENATE - July 20

33. LABOR-FEDERAL SECURITY APPROPRIATION BILL. Agreed to a further conference report on this bill, H. R. 6739, and to an amendment which modifies the item on ILRB so as to prevent it from organizing or assisting in organizing of agricultural laborers as that term is defined in the Fair Labor Standards Act (pp. 9641-2). This bill will now be sent to the President.
34. PRICE CONTROL. Sen. Reed, Kans., stated that since the expiration of price control there has been a regular flow of corn from the farms through the regular channels to the shortage areas and inserted tables showing corn receipts at primary markets (pp. 9669-70).
- Sen. Wherry, Nebr., inserted reports from the livestock markets, which he says show "a good proportion of cattle selling at lower than the prices that prevailed during the last week in June", and letters urging the dropping of controls on grain and poultry (pp. 9670-1).
- Received a Los Angeles, Calif., citizens' petition urging the continuation of price control (p. 9639).
35. RECESSED until Mon., July 22 (p. 9671).

BILLS INTRODUCED - July 19

36. LABOR. S. 2457, by Sen. Thomas, Utah, to promote the welfare of the people by establishing a publicly supported adult labor extension program. To Education and Labor Committee. (p. 9536)

37. VETERANS' HOUSING. S. 2459, by Sen. Pepper, Fla., to extend the maturity for mortgages under the National Housing Act in the case of property owned by veterans of World War II. To Banking and Currency Committee. (p. 9536.)

BILLS INTRODUCED - July 20

38. PERSONNEL. S. 2463, by Sen. Guffey, Pa., to increase the rates of compensation of officers and employees of the Federal Government. To Civil Service Committee. (p. 9640.)
S. 2464, by Sen. Taylor, Idaho, to provide for the uniform administration of efficiency ratings. To Civil Service Committee. (p. 9640.)
H.R. 7096, by Rep. Hess, Ohio, declaring August 14 of each year a legal holiday. To Judiciary Committee. (p. 9733.)
39. FOREIGN RELATIONS. H.R. 7093, by Rep. Flannagan, Va., to promote the agriculture of the U.S. by acquiring and diffusing useful information regarding agriculture in the foreign field. To Agriculture Committee. (p. 9733.)
40. REORGANIZATION. H.R. 7094, by Rep. Pittenger, Minn., to repeal the Reorganization Act of 1945. To Expenditures in the Executive Departments Committee. (p. 9733.)

ITEMS IN APPENDIX - July 19

41. COOPERATIVES. Speech in the House by Rep. Patman, Tex., discussing the Small Business Committee's report on farm and other cooperatives and inserting the conclusions of that committee (pp. A4459-92).
42. FOOD PRICES. Rep. Buchanan, Pa., inserted a Potter-McCune Co.'s (wholesale grocers, McKeesport, Pa.) letter citing increased food prices and urging increased production as a means of decreasing prices (p. A4499).
Extension of remarks of Rep. Rockwell, Colo., stating that meat prices in Denver, Colo., are under OPA ceilings due to the increased supplies diverted from the black market and inserting statistics on the subject (pp. A4512-3).
43. DAIRY PRODUCTS. Extension of remarks of Rep. Schwabe, Okla., urging the continued decontrol of dairy products and inserting two dairy companies' letters on the subject (p. A4519).
44. SMALL BUSINESS. Extension of remarks of Rep. Patman, Tex., stating that few private organizations are aiding small business, commending the Washington Small Business Newsletter for its aid to small business, and inserting Jesse Robison's (WSBN) statement on the subject (pp. A4495-7).
45. TRANSPORTATION. Sen. Tunnell, Del., inserted a Wilmington (Del.) Morning News editorial favoring H.R. 2536, to authorize ICC to supervise freight-rate agreements between carriers and excepts such carriers from prosecution under Federal antitrust laws (p. A4497).
46. FOREIGN TRADE. Rep. Celler, N.Y., inserted Commerce Secretary Wallace's, and other's, statements favoring expansion of the foreign-trade zone at New Orleans (pp. A4502-3).
47. RESEARCH; ATOMIC ENERGY. Extension of remarks of Rep. McDonough, Calif., opposing S. 1717 as amended and favoring recommitment to the committee (p. A4506).
Rep. Rogers, Mass., inserted a N.Y. Herald Tribune editorial favoring War

the first place she is limited by papa's pay check. In the second place, even if she had the money, her pride would prevent her from playing sucker.

Mama is the person the Washington storekeeper had in mind when he explained to a reporter why he still didn't have any meat.

"Meat at that price?" said the storekeeper. "I won't fool with it! My customers wouldn't stand for it."

Multiply mama by a few million and you have what an economist might term a strong antinflationary influence. Your merchant, your manufacturer, your farmer are a lot more scared of mama than they ever were of Chester Bowles or Paul Porter.

And if mama and her tribe, who constitute the American people, are such fatheads as these liberals think, how did we ever do so well in the days before planned economy got into the language?

How did we ever cut down the trees, build the homes, farms and factories which made us big and strong enough to lick Hitler, arm and feed the world?

If the country has lost the spunk and common sense which made it, may the Lord help us. We doubt if these long-term planners can.

We are not, as we said, going into the predicting business, but we think there is some slight justification for the belief, and hope, that these cocktail-room strategists may be wrong—again.

EXECUTIVE SESSION

Mr. GREEN. Mr. President, I move that the Senate proceed to the consideration of executive business.

The motion was agreed to; and the Senate proceeded to the consideration of executive business.

EXECUTIVE MESSAGES REFERRED

The PRESIDING OFFICER (Mr. HOEY in the chair) laid before the Senate messages from the President of the United States submitting several nominations, which were referred to the Committee on the Judiciary.

(For nominations this day received, see the end of Senate proceedings.)

The PRESIDING OFFICER. Reports of committees are in order. If there be

no reports of committees, the clerk will state the nominations on the Executive Calendar.

CALIFORNIA DEBRIS COMMISSION

The legislative clerk read the nomination of Col. George Mayo, Corps of Engineers, to be a member of the California Debris Commission.

The PRESIDING OFFICER. Without objection, the nomination is confirmed.

THE ARMY

The legislative clerk proceeded to read sundry nominations in the Army.

The PRESIDING OFFICER. Without objection, the Army nominations are confirmed en bloc.

THE NAVY

The legislative clerk proceeded to read sundry nominations in the Navy.

The PRESIDING OFFICER. Without objection, the Navy nominations are confirmed en bloc, and, without objection, the President will be notified forthwith of all confirmations of today.

RECESS

Mr. GREEN. Mr. President, I move that the Senate take a recess until 11 o'clock a. m. on Monday next.

The motion was agreed to; and (at 5 o'clock and 6 minutes p. m.) the Senate took a recess, the recess being, under the order previously entered, to Monday, July 22, 1946, at 11 o'clock a. m.

NOMINATIONS

Executive nominations received by the Senate July 20 (legislative day of July 5), 1946:

CIRCUIT COURTS, TERRITORY OF HAWAII

Gerald R. Corbett, of Hawaii, to be sixth judge of the first circuit, circuit courts, Territory of Hawaii, new position.

MUNICIPAL COURT FOR THE DISTRICT OF COLUMBIA

Hon. George D. Neilson, of the District of Columbia, to be associate judge of the mu-

nicipal court for the District of Columbia. (Judge Neilson is now serving in this office under an appointment which expired April 29, 1946.)

UNITED STATES ATTORNEY

Dan B. Shields, of Utah, to be United States attorney for the district of Utah. (Mr. Shields is now serving in this office under an appointment which expired March 23, 1946.)

UNITED STATES MARSHAL

Donald A. Draughon, of Puerto Rico, to be United States marshal for the district of Puerto Rico. (Mr. Draughon is now serving in this office under an appointment which expired July 3, 1946.)

CONFIRMATIONS

Executive nominations confirmed by the Senate July 20 (legislative day of July 5), 1946:

CALIFORNIA DEBRIS COMMISSION

Col. George Mayo, Corps of Engineers, to be a member of the California Debris Commission.

IN THE ARMY

APPOINTMENTS IN THE REGULAR ARMY OF THE UNITED STATES

Brig. Gen. Henry Balding Lewis to be Assistant The Adjutant General, with the rank of brigadier general, for a period of 4 years from the date immediately following that upon which Brig. Gen. Thomas Jefferson Davis, the present incumbent, vacates his appointment as Assistant The Adjutant General.

Roger Gordon Alexander to be the dean of the academic board of the United States Military Academy, with the rank of brigadier general, Regular Army.

IN THE NAVY

APPOINTMENTS IN THE NAVY

To be assistant paymasters in the Navy with the rank of ensign

James E. Brown	Karl W. Fischer, Jr.
William S. Benson 2d	Arthur E. Linder
John J. Caporaso	Sherman F. Drake
Wesley J. McClaren	

House of Representatives

SATURDAY, JULY 20, 1946

The House met at 10 o'clock a. m.

Rev. Bernard Braskamp, D. D., pastor of the Gunton-Temple Memorial Presbyterian Church, Washington, D. C., offered the following prayer:

O Thou who hast revealed Thyself as a prayer-hearing and prayer-answering God, may we now in all simplicity and sincerity invoke Thy blessing and benediction, beseeching Thee that we may pursue and perform our duties with a steadfast and single-hearted devotion.

We pray that our President, our Speaker, and all the Members of this legislative body who have been entrusted with leadership in the life of our Republic may be blessed with capacities and powers equal to the difficult problems and tragic necessities of our generation and equal to the opportunities and responsibilities of lifting and leading humanity into a loftier idealism.

Grant that in our longing and search for a more brotherly world and a nobler social order we may be ready and willing to yield ourselves to the demands and disciplines of that quest. Help us to see more vividly that if this quest is ever to become a glorious conquest then we must surrender our lives to the spirit of self-denial and sacrifice which was the spirit of our Lord and Saviour.

In His name we pray. Amen.

THE JOURNAL

The Journal of the proceedings of yesterday was read and approved.

MESSAGE FROM THE SENATE

A message from the Senate, by Mr. Gatling, its enrolling clerk, announced that the Senate agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H. R. 6385) entitled "An act making appropriations to supply deficiencies in certain appropriations for the fiscal year ending June 30, 1946, and for prior fiscal years, to provide supplemental appropriations for the fiscal year ending June 30, 1946, to provide appropriations for the fiscal year ending June 30, 1947, and for other purposes."

The message also announced that the Senate agrees to the amendments of the House to the amendments of the Senate numbered 33, 34, 46, 52½, 62, 69, 81, and 86 to the foregoing bill.

The message also announced that the Senate insists upon its amendments to the bill (H. R. 4497) entitled "An act to create an Indian Claims Commission, to provide for the powers, duties, and functions thereof, and for other purposes," disagreed to by the House; agrees to the conference asked by the House on the disagreeing votes of the two Houses thereon, and appoints Mr. O'MAHONEY, Mr. THOMAS of Oklahoma,

and Mr. LA FOLLETTE to be the conferees on the part of the Senate.

The message also announced that the Senate agrees to the reports of the committees of conference on the disagreeing votes of the two Houses on the amendments of the Senate to bills of the House of the following titles:

H. R. 2192. An act for the relief of Andre Dachany;

H. R. 3543. An act for the relief of the legal guardian of James Thompson, a minor; and

H. R. 5452. An act making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1947, and for other purposes.

The message also announced that the President pro tempore has appointed Mr. BARKLEY and Mr. BREWSTER members of the joint select committee on the part of the Senate, as provided for in the act of August 5, 1939, entitled "An act to provide for the disposition of certain records of the United States Government," for the disposition of executive papers in the following departments and agencies:

1. Department of Agriculture.
2. Department of the Interior.
3. Department of the Navy.
4. Department of the Treasury.
5. Department of War.
6. Post Office Department.
7. Alien Property Custodian.
8. Federal Communications Commission.
9. Federal Security Agency.
10. Federal Works Agency.
11. National Archives.

EXTENSION OF REMARKS

Mr. ROBERTSON of Virginia asked and was given permission to extend his remarks in the Record and include therewith a brief statement by Mr. Fred B. Myers, of the Sons of Confederate Veterans.

Mr. LANE asked and was given permission to extend his remarks in the Record.

Mr. JOHNSON of California asked and was given permission to extend his remarks in the Appendix of the Record and include an editorial.

Mr. HOFFMAN of Michigan asked and was given permission to extend his own remarks in the Record in three instances and to include newspaper articles and letters.

Mr. PLOESER asked and was given permission to extend his own remarks in the Appendix of the Record.

Mr. BUTLER asked and was given permission to extend his remarks in the Appendix of the Record and include an address he made last Sunday.

Mr. MUNDT asked and was given permission to extend his remarks in the Appendix of the Record and include an editorial from the Evening Star of last

night dealing with the scuttling of the Preemployment Investigating Service of the United States Civil Service.

Mr. RICH. Mr. Speaker, I ask unanimous consent to insert in the Appendix of the Record an article from this morning's Post entitled, "Seventy-eight Miles Per Hour Speed in Auto Costs Woman \$175," and add my remarks thereto.

The SPEAKER. Is there objection to the request of the gentleman from Pennsylvania?

There was no objection.

[The matter referred to appears in the Appendix.]

ATOMIC ENERGY ACT OF 1946

Mr. MAY. Mr. Speaker, I move that the House resolve itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill (S. 1717) for the development and control of atomic energy.

The motion was agreed to.

Accordingly the House resolved itself into the Committee of the Whole House on the State of the Union for the further consideration of the bill S. 1717, with Mr. MILLS in the chair.

The Clerk read the title of the bill.

The CHAIRMAN. The Clerk will report the committee amendment.

The Clerk read as follows:

Committee amendment: On page 42, line 9, after the period, strike out the balance of the line, down to and including the period on line 12.

The committee amendment was agreed to.

The Clerk read as follows:

COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

SEC. 13. (a) The United States shall make just compensation for any property or interests therein taken or requisitioned pursuant to sections 5 and 11. The Commission shall determine such compensation. If the compensation so determined is unsatisfactory to the person entitled thereto, such person shall be paid 50 percent of the amount so determined, and shall be entitled to sue the United States in the Court of Claims or in any district court of the United States in the manner provided by sections 24 (20) and 145 of the Judicial Code to recover such further sum as added to said 50 percent will make up such amount as will be just compensation.

(b) In the exercise of the rights of eminent domain and condemnation, proceedings may be instituted under the act of August 1, 1888 (U. S. C., title 40, sec. 257), or any other applicable Federal statute. Upon or after the filing of the condemnation petition, immediate possession may be taken and the property may be occupied, used, and improved for the purposes of this act, notwithstanding any other law. Real property acquired by purchase, donation, or other means of transfer may also be occupied, used, and improved for the purposes of this act, prior to approval of title by the Attorney General.

The CHAIRMAN. The Clerk will report the committee amendment.

The Clerk read as follows:

On page 45, line 12, insert:

"JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE"

"SEC. 14. (a) Notwithstanding the provisions of section 12 of the Administrative Procedure Act (Public Law 404, 79th Cong., approved June 11, 1946), which provide, when such act shall take effect, section 10 of such act (relating to judicial review) shall be applicable, upon the enactment of this act, to any agency action under the authority of this act or by any agency created by or under the provisions of this act.

"(b) Except as provided in subsection (a), no provision of this act shall be held to supersede or modify the provisions of the Administrative Procedure Act.

"(c) As used in this section the terms 'agency action' and 'agency' shall have the same meaning as is assigned to such terms in the Administrative Procedure Act."

The committee amendment was agreed to.

The Clerk read as follows:

JOINT COMMITTEE ON ATOMIC ENERGY

SEC. 14. (a) There is hereby established a Joint Committee on Atomic Energy to be composed of nine Members of the Senate to be appointed by the President of the Senate, and nine Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. In each instance not more than five members shall be members of the same political party.

(b) The joint committee shall make continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. The Commission shall keep the joint committee fully and currently informed with respect to the Commission's activities. All bills, resolutions, and other matters in the Senate or the House of Representatives relating primarily to the Commission or to the development, use, or control of atomic energy shall be referred to the joint committee. The members of the joint committee who are Members of the Senate shall from time to time report to the Senate, and the members of the joint committee who are Members of the House of Representatives shall from time to time report to the House, by bill or otherwise, their recommendations with respect to matters within the jurisdiction of their respective Houses which are (1) referred to the joint committee or (2) otherwise within the jurisdiction of the joint committee.

(c) Vacancies in the membership of the joint committee shall not affect the power of the remaining members to execute the functions of the joint committee, and shall be filled in the same manner as in the case of the original selection. The joint committee shall select a chairman and a vice chairman from among its members.

(d) The joint committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such places and times, to require, by subpoena or otherwise, the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words. The provisions of sections 102 to 104, inclusive, of the Revised Statutes shall apply in case of any failure of any witness to comply with a subpoena or to testify when summoned under authority of this section.

(e) The joint committee is empowered to appoint and fix the compensation of such experts, consultants, technicians, and clerical and stenographic assistants as it deems necessary and advisable, but the compensa-

tion so fixed shall not exceed the compensation prescribed under the Classification Act of 1923, as amended, for comparable duties. The committee is authorized to utilize the services, information, facilities, and personnel of the departments and establishments of the Government.

Committee amendments: Page 46, line 5, strike out "14" and insert "15."

Page 46, line 6, strike out "nine" and insert "eleven."

Page 46, line 8, strike out "nine" and insert "eleven."

Page 46, line 10, strike out "five" and insert "six."

The committee amendments were agreed to.

The Clerk read as follows:

ENFORCEMENT

SEC. 15. (a) Whoever wilfully violates, attempts to violate, or conspires to violate, any provision of sections 4 (b), 4 (e), 5 (a) (3), or 6 (b) shall, upon conviction thereof, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 5 years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than 20 years, or both.

(b) Whoever wilfully violates, attempts to violate, or conspires to violate, any provision of this act other than those specified in subsection (a) and other than section 10 (c), or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (d), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than 2 years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than 20 years, or both.

(c) Whenever in the judgment of the Commission any person has engaged or is about to engage in any acts or practices which constitute or will constitute a violation of any provision of this act, or any regulation or order issued thereunder, it may make application to the appropriate court for an order enjoining such acts or practices, or for an order enforcing compliance with such provision, and upon a showing by the Commission that such person has engaged or is about to engage in any such acts or practices a permanent or temporary injunction, restraining order, or other order shall be granted without bond.

(d) In case of failure or refusal to obey a subpoena served upon any person pursuant to section 12 (a) (3), the district court for any district in which such person is found or resides or transacts business, upon application by the Commission, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, or both, in accordance with the subpoena; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

Committee amendment: Page 48, line 9, strike out "15" and insert "16."

The committee amendment was agreed to.

The Clerk read as follows:

Committee amendment: Page 49, line 16, strike out "shall" and insert "may"; and strike out the words "without bond."

The committee amendment was agreed to.

The Clerk read as follows:

Committee amendment: Page 50, add a new paragraph as follows:

"(e) All violations of this act shall be investigated by the Federal Bureau of Investigation of the Department of Justice."

The committee amendment was agreed to.

Mr. RICH. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I have listened to the debate on this bill on atomic energy and have read a great deal of what I did not sit here and listen to during the past 3 or 4 days. I have never been so bewildered in my life or so disillusioned as I am about this legislation. I cannot find in my own mind why the bill has ever been brought here. I do not believe the ones who are sponsoring this legislation are for the legislation.

Mr. REED of New York. Mr. Chairman, will the gentleman yield?

Mr. RICH. I yield to the gentleman from New York.

Mr. REED of New York. Was not the gentleman astounded when he heard the gentleman from Ohio [Mr. ELSTON] say that the provision relating to patents was not in accord with our patent laws but was in accord with the Russian patent laws?

Mr. RICH. I was not so much surprised at that statement because of the fact that the legislation has been brought in here without anybody wishing to be the father of it. No one wants to assume the responsibility for the bill. Where did it come from? Who wrote the legislation? Who is back of it now?

There is something rotten in Denmark, if I know anything about it. Why the membership of the House would sponsor legislation that so few Members know anything about is the most perplexing thing I have seen since I have been a Member of Congress.

Mr. JOHNSON of California. Mr. Chairman, will the gentleman yield?

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. RICH. Not for the moment. I want to complete my statement because some of the fellows around this Chamber seem to think they know something about the atomic bomb. I know very little about it and the more I hear you fellows talk the less I know. Some men in the House know so much about the atomic bomb and the rest of us know so little about the atomic bomb that we are not qualified to vote for this bill. You had therefore better send it back to the committee where there will be an opportunity for the people of this country and the Members of the House to study it.

This world is in a terrible state of affairs. We are having uprisings, we are having revolutions, we have had wars. Who is fit to have destructive weapons more deadly than poison? This is supposed to be the most deadly weapon that has ever been presented to the Army of the United States, and no one is supposed to know anything about it but our own Army. The secrets are all supposed to be within our own Army, and that is the place where we ought to keep them. We should let the secrets remain in the hands of our Army until we know more about it, and until the Army is willing to convey information to us as to what the atomic bomb really is and what it will do, because they are experimenting with it and they are trying to find

out just exactly what it will do. Certainly we should not give these deadly bombs to every nation to destroy other nations. If you had a deadly poison in your possession, you would not put it where it might harm another person. No, you would hide it so no one could get it. Let us do that with the bomb.

Mr. GAVIN. Mr. Chairman, will the gentleman yield?

Mr. RICH. I yield to the gentleman from Pennsylvania.

Mr. GAVIN. We have faith in the War Department. That Department has handled this in a very satisfactory manner and until we find what direction world affairs are going to follow, we ought to mind our own business and keep this in the War Department. It belongs there. I agree with the gentleman from Pennsylvania that the proper thing to do is to recommit this bill and leave this matter lie for the time being.

Mr. RICH. I agree with the gentleman from Pennsylvania and I admire him because he and I think pretty much alike in most things. When I find that one thinks as I do I cannot help but take my hat off to him because a great many Members of Congress do not believe that I am right all the time, due to the fact they do not vote like I do. When it comes to this legislation, when I see the conditions that exist in the world today, and when I realize that the bomb and its secrets are held within our own Army, in my opinion, we ought to leave them there until we know more accurately what we are doing. Do not give the bombs to any nation that might use them against us. Do not give them to any other nation for fear they may be used against some other nation. If our Army retains them, then no others need to have them. They cannot harm any other nation. That seems to me to be just plain common sense. I shall vote to recommit the bill to the committee if given an opportunity.

For the best interests of the world in general and the United States in particular at this time, July 20, 1946, put the bill in committee, there to rest for a time, or else vote down the bill from passage at this time.

The CHAIRMAN. The time of the gentleman from Pennsylvania has expired.

Mr. RANKIN. Mr. Chairman, a point of order. The Members ought to be here to hear this debate and I make the point of order there is not a quorum present.

The CHAIRMAN. The Chair will count.

Mr. RANKIN. Mr. Chairman, I withdraw my point of order.

Mr. THOMAS of New Jersey. Mr. Chairman, I move to strike out the last two words.

Mr. Chairman, as a result of the amendments that have been agreed to here in the last 2 days some of our friends in the world, if we can call them friends, and I hope we can, are beginning to give us some sugar-coated propaganda.

We read in the paper this morning that Andrei Gromyko, Soviet delegate, told the Atomic Energy Commission's scientists yesterday that nobody is asking for secrets; that what Russia wants now is a method of exchange of scientific

data for the peaceful use of atomic energy. The chairman of that committee was Prof. Hendrik A. Kramers, of the Netherlands. The good professor had this to say:

With memories of 5 years under Nazi occupation, we are no longer idealists, we are realists.

That is just exactly what we want to be, realists. Irrespective of all the amendments that we have passed, I think we would be taking a tremendous risk if we permitted this bill to go to conference, because if the bill does go to conference we run the risk of having most of our amendments thrown out, opening the door for doing the very thing that we are trying to prevent; that is, opening the door to letting vital defense secrets go out to other nations of the world.

So, I say, irrespective of what amendments have been passed, let us not take a chance. Let us recommit this bill and put it in the safe of the Committee on Military Affairs until such time as that committee feels we have peace in the world, so that there will be no chance of the use of our vital secrets for war purposes.

Mr. DONDERO. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. DONDERO: Page 50, line 1, as a substitute amendment for the committee amendment, insert the following:

"All persons associated in any capacity with the development and control of atomic energy under the Commission and all violations of this act shall be investigated by the Federal Bureau of Investigation of the Department of Justice."

Mr. DONDERO. Mr. Chairman, the amendment which has just been read at the Clerk's desk perhaps speaks louder than anything I could say from the floor. The bill as written provides that the Federal Bureau of Investigation shall investigate all violations under this act. The purpose of the amendment is that not only all violations should be investigated by the FBI, but that all personnel employed on this particular subject dealing with atomic energy shall have a fair and reasonable screening so that we will know that only Americans are on guard or interested in this mystic power. The national defense is involved in this legislation.

Mr. THOMASON. Mr. Chairman, will the gentleman yield?

Mr. DONDERO. I yield to the gentleman from Texas.

Mr. THOMASON. Does not the gentleman from Michigan think that the amendment offered yesterday by the gentleman from Virginia [Mr. SMITH], and adopted, covers the entire field?

Mr. DONDERO. I think that amendment covers the field fairly well. I examined the amendment offered by the gentleman from Virginia again this morning, and the word omitted is the word "loyalty." It does speak of character; it does speak of association, and I think the amendment is fairly broad and to a very large degree would do what my amendment intends to do, with that one exception.

Mr. THOMASON. I supported the Smith amendment and I did it in the be-

lief that you could surely trust the FBI about it. We give the FBI wide latitude to examine all personnel.

Mr. DONDERO. I have a very profound respect for the FBI, and I know that they do their work well. My purpose in offering the amendment is as I have stated. I desire to strengthen the hands of this agency. Of course, it was on the Clerk's desk before the amendment of the gentleman from Virginia was offered and adopted. This amendment would protect our Government and the secrets related to this awesome and strange power.

The CHAIRMAN. Does the Chair understand the gentleman to withdraw his amendment?

Mr. DONDERO. Not for the present, Mr. Chairman.

Mr. RANKIN. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, of course, I do not think that any amendments are going to help this bill. All the perfumes of Arabia would not sweeten it to where I could vote for it.

But if you are going to adopt any amendment at all, you should adopt the amendment offered by the gentleman from Michigan. If you are not going to test the loyalty of these men, how are you going to get rid of the traitors who are spying in every department of the Government? Look at what they caught out here at Aberdeen day before yesterday? What were they there for? Stealing military secrets to give to our enemies. If you are not going to test their loyalty, you might as well wipe out the Smith amendment.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from California.

Mr. VOORHIS of California. We have already provided for that in the amendment adopted yesterday.

Mr. RANKIN. I do not believe you did. Not only that, it is not provided for elsewhere. Everybody knows that when you permitted the commissioning of Communists you packed them into the War Department over the protest of our military leaders. They are packed into every department of this Government, if you want to know the truth of it, and the Committee on Un-American Activities knows it. Let us get rid of these subversive elements that are trying to undermine and destroy America.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from Ohio.

Mr. ELSTON. Does not the gentleman feel that it is just as essential that there be the strictest kind of supervision as it is to punish after the crime is committed?

Mr. RANKIN. Certainly. The way to prevent crime is to keep the criminals out.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from Kentucky.

Mr. MAY. I call the attention of the gentleman from Mississippi to the fact that the House Committee on Military

Affairs participated in the investigation of those things, too, with good results.

Mr. RANKIN. Yes, and the House Committee on Military Affairs has been here all the time these subversive elements have been packed into the War Department. I am not criticizing the members of that committee, but our officials have not been on the alert as they should have been or they would not have had those subversive elements packed into the various departments of this Government.

Mr. MUNDT. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from South Dakota.

Mr. MUNDT. Does the gentleman agree with me that it is equally important to set up a suitable screening process to prevent those engaged in un-American activities from being employed in the first instance?

Mr. RANKIN. It is infinitely more so. What good did it do to arrest John Wilkes Booth after he had shot the President?

Mr. MUNDT. That is correct. For that reason, I called to the attention of the House this week the fact that the Budget Bureau has literally scuttled the whole preemployment investigative service of the United States Civil Service Commission. I think before we adjourn the Congress should take steps to set up that investigative service again.

Mr. RICH. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from Pennsylvania.

Mr. RICH. The gentleman saw in the papers yesterday that five people were fired at the Aberdeen Proving Ground.

Mr. RANKIN. Yes; I spoke of that on the floor. I read the names into the RECORD. Not one of them is a real American.

Mr. RICH. If they are Communists, the War Department did the right thing in getting them out.

Mr. RANKIN. I understand, but the thing is they should not have been there in the first place. There has been too much laxity in permitting these subversive elements to crowd into the various departments. That is what I am kicking about. Just as sure as you leave any opening at all they will crowd in, and you will find that they will betray the American people, and the first thing you know if they have their way our people will be blown to pieces with this atomic bomb.

Mr. DONDERO. Mr. Chairman, will the gentleman yield?

Mr. RANKIN. I yield to the gentleman from Michigan.

Mr. DONDERO. The amendment I have offered is simply intended to strengthen the enforcement provisions of this bill.

Mr. RANKIN. I know that.

Mr. DONDERO. It seems to me that no harm can be done by adopting it.

Mr. RANKIN. Certainly not.

Mr. Chairman, you have just had an example. If there is a man in this House that does not know that communism is the enemy of everything for which America stands, he ought to drop over

to St. Elizabeths and get a mental examination.

If there is a human being in this House that does not know by this time that communism is dedicated to the destruction of our form of government, our economic system, and our American way of life, as well as Christianity itself, then he ought to go over to St. Elizabeths and get a mental examination.

Just the other day one of the greatest crimes in all the history of mankind was perpetrated in Yugoslavia. They murdered Mihailovich. I have a picture here of the American airmen picketing the Yugoslav consulate. That is a picket line of which I approve.

It shows there that they were the ones that were saved by this man that the Communists murdered. And that is the gang that wants to get their hands on the atomic bomb.

The CHAIRMAN. The time of the gentleman from Mississippi has expired.

ATOMIC ENERGY INVESTIGATION SHOULD NOT BE LIMITED TO GOVERNMENT EMPLOYEES ONLY

Mr. DOYLE. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, on yesterday we turned back to any individual in this Nation the right to purchase secretly or acquire and control atomic energy at its source without regard to our national safety and also the right to manufacture military weapons for private gain. That naturally means that individuals in this country, and companies and corporations, and possibly Communists in this country have been given the right by your vote on yesterday in adopting the substitute on the section 11 to manufacture atomic energy for military weapons without prior disclosure to the United States Government. In fact, you opened the door by your deletion on yesterday of the patent section of the bill S. 1717 as it came from the Senate to subversive persons who do not wish to disclose their invention to the United States Government, of inventions for military purposes in the field of atomic energy. I challenge anyone to read the amendment you adopted in place of original section 11 as of yesterday, and show if my statement just now made is erroneous in any particular. I estimate that on yesterday, 90 percent of the Members of the House never had previously read the amendment or the substitute on which you voted relating to section 11 because there were not enough copies on the floor so that we could all read them. And, I know you cannot well contradict me when I say that the substitute of over 2 pages was a complete reversal of the policy of the original bill. My point is this: Why do you people keep talking about subversive elements only in the lists of Government employees when on yesterday you turned this over to any one, any place, and at any time to acquire, use, or produce—outside of the United States Government? Why do you not apply the amendment proposed by the gentleman from Michigan to the employees of private industry too? Why do you assume that there will be no subversive or unpatriotic influences in employment in private industry and

let all who have anything to do with atomic energy outside Government go without being checked by the FBI? Do you not suppose that some private persons in and out of private industry may possibly be subversive or unpatriotic in their secret and undisclosed use of atomic energy for the purpose of making money? This proposed amendment to have the FBI only investigate employees of the Commission is entirely inadequate. I say to you, if you are going to turn over the control of the manufacture of military weapons as you yesterday voted to do to private industry for the purpose of making money out of war, then you are also under an obligation to have all who work in private industry with atomic power likewise investigated by the FBI. Can anyone tell me why it is sound to apply it to Government employees only?

Mr. RICH. Mr. Chairman, will the gentleman yield?

Mr. DOYLE. I yield.

Mr. RICH. Do you think for a minute that any employer in the United States would employ a Communist if he knew he was a Communist? There certainly is not an employer in the whole United States who would do that.

Mr. DOYLE. I will say to the gentleman I think there are people in America who would employ most any tactics to make piles of money. Yes, they certainly might.

Mr. RICH. That fellow then is not an American.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentleman yield?

Mr. DOYLE. I yield to the gentleman from New Jersey, a member of the committee.

Mr. THOMAS of New Jersey. I assume from what the gentleman from California says that he does not approve of the bill. Therefore, are you going to vote to recommit the bill?

Mr. DOYLE. I am not going to vote to recommit the bill even if the patent section is left out of the bill, the way it was originally. I am saying that I am opposed to any subversive influences in Government or in our American life any place. I am opposed to the sabotaging of any part of our American form of government. I am absolutely opposed to un-American activities of any kind anywhere, by anybody. But why do you men limit the FBI investigation for loyalty to Government business relative to atomic energy? You and I know—I know—I have practiced law for 25 years—that some men are said to have been subversive and unpatriotic enough for the purpose of making millions of dollars who have not been Government employees either. Why did you put in the death penalty yesterday if you did not think it was fundamentally necessary to protect all the people of our beloved Nation from unpatriotic treason in the matter of atomic energy? It is necessary to protect the American people against subversive activities regarding this atomic energy, in industry, as it is to protect against it in the departments of Government, when you turn the manufacture of military weapons out of atomic energy over for the purpose of making money. Yes, you voted yesterday to

make it so American industry can make more money profits out of war. So thereby it encouraged war.

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. DOYLE. I yield.

Mr. VOORHIS of California. We have already seen instances where the patents themselves were the principal elements in cartel agreements whereby we know there was an exchange of information between big corporations.

Mr. DOYLE. Certainly. In other words, by yesterday's vote we turned the manufacture of military weapons, with the element of atomic energy in them, over to the purpose of making money profit, so that they could be manufactured without let or hindrance by anybody subject to the Government buying them at fabulous prices by condemnation or otherwise. By yesterday's vote, the only time that you require disclosure by a man who has invented a military weapon that uses atomic energy, is 60 days after he makes up his mind that it has some military value and then he is only required to file a report with the United States Government. The Government does not even have an exclusive option to acquire the atomic weapon; no, not even for a day.

The CHAIRMAN. The time of the gentleman from California has expired.

Mr. CASE of South Dakota. Mr. Chairman, I rise in opposition to the pro forma amendment.

Mr. Chairman, I would like to ask the gentleman from California if he is so concerned about the character of the people to be employed by private industry if he would support an amendment to the Wagner Act to give the private employer a chance to have a little discretion concerning the character of the people he employs.

Mr. DOYLE. I think the gentleman is going far afield in trying to here attack the Wagner Act. I do not think it is pertinent to this matter at all.

Mr. CASE of South Dakota. I am not going far afield. I know that that is one great problem that private industry is faced with in trying to eliminate subversive employees.

Mr. DOYLE. I will answer the gentleman that I am so concerned with the protection of this atomic energy for my beloved Nation in its need for control of it for military purposes, at least, that I am willing, I am anxious, I am insisting, if you please, that if you are going to investigate anybody that is concerned with the manufacture of atomic energy for military purposes, you investigate everybody by the FBI who is involved or associated with development of atomic energy. What are you afraid of? Surely no responsible manufacturer or patriotic businessman is afraid to be himself or have his employees all checked up.

The CHAIRMAN. The time of the gentleman from South Dakota [Mr. CASE] has expired.

Mr. HOFFMAN of Michigan. Mr. Chairman, I move to strike out the last word, and I ask unanimous consent to revise and extend my remarks.

The CHAIRMAN. Without objection, it is so ordered.

There was no objection.

Mr. HOFFMAN of Michigan. Mr. Chairman, the purpose is to say to the gentleman from California [Mr. DOYLE] that under the ruling of the National Labor Relations Board in interpreting the National Labor Relations Act, all through the war employers engaged in the manufacture of munitions were violating that act if they even questioned the loyalty or called attention to the criminal or subversive record of any employee who was working for them. Will the gentleman go far enough to support an amendment to the Wagner Act to make it possible for an employer to expose the traitorous activities of his employees?

Mr. DOYLE. Why are you trying to sidetrack the issue in this debate today? Why do you not stick to the subject?

Mr. HOFFMAN of Michigan. I am not trying to sidetrack it. You mentioned the specific instance of the manufacturer of atomic energy. Why do you not include the manufacturers of munitions of war, submarines, and all the rest of the things needed in war? Why do you not go the whole length? Why not protect the Nation from traitors in any and all factories? Are you just trying to raise a smoke screen?

Mr. RANKIN. Mr. Chairman, will the gentleman yield?

Mr. HOFFMAN of Michigan. I yield to the gentleman from Mississippi.

Mr. RANKIN. I am of the opinion that the gentleman from California is supporting this crazy FEPC, that would close the mouth of every businessman when they would go to investigate their employees.

Mr. HOFFMAN of Michigan. The point I am making, and the only point I am making, is this: The gentleman from California [Mr. DOYLE] is deeply concerned, and rightly so, if I understand him correctly, by a condition which he believes exists where employees of private individuals who might be engaged in some phase of work looking toward the construction of the atomic bomb may be disloyal or engaged in subversive activities and might carry on their disloyal schemes without in any way being amenable under this act.

But the danger is not limited to the employees of those who may be engaged on some phase of the work looking toward the production of the atomic bomb.

Let me repeat, under the National Labor Relations Act, as interpreted and administered by the National Labor Relations Board, an employer is guilty of an unfair labor practice if he calls attention to the fact that an employee, or an organizer of the union seeking to organize his employees, or a bargaining agent chosen by the union, is or has been a traitor to our Government; has in the past or is at the moment engaged in disloyal or subversive activities.

Ten years ago attention was called to this situation; to the necessity of amending the National Labor Relations Act. But the Congress, either because of lack of courage or inclination, has refused to accept amendments which I have offered and which would have corrected this dangerous and outrageous situation.

The idea that a convict, a criminal, a man engaged in preventing industrial production, a man representing an organization seeking—not the good of the worker, not the welfare of the union or of the country, but endeavoring to put over a scheme whereby he may force workers to pay tribute for the exercise of their constitutional right to work for a livelihood, is so preposterous that it never would have been accepted had it been clearly understood by our people.

In my opinion, it would never have been permitted to exist and continue if the Members of Congress realized the situation and used their best judgment.

The denial of the right of the employer to tell the truth about one who is carrying on subversive activities, to expose an organizer who has a criminal record, is even more absurd.

Some day the Congress will be forced by public sentiment to rewrite the National Labor Relations Act. Such legislation was offered by me in 1939, and another bill looking toward the same purpose will be introduced by me in the opening days of the next session of Congress, if I am reelected.

It is my purpose to push amendments to this act as vigorously as lies within my power.

Mr. Chairman, I yield back the remainder of my time.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Michigan.

Mr. PHILLIPS. Mr. Chairman, I ask unanimous consent that the amendment again be reported.

The CHAIRMAN. Without objection, the Clerk will again report the amendment offered by the gentleman from Michigan.

There being no objection, the Clerk again reported the amendment offered by the gentleman from Michigan [Mr. DONDERO].

The CHAIRMAN. The question recurs on the amendment offered by the gentleman from Michigan [Mr. DONDERO].

The amendment was agreed to.

The CHAIRMAN. The question recurs on the committee amendment, as amended.

The committee amendment, as amended, was agreed to.

Mr. ELSTON. Mr. Chairman, I offer an amendment, which is at the Clerk's desk.

The Clerk read as follows:

Amendment offered by Mr. ELSTON: On page 48, line 22, after the designation "C", strike out the remainder of line 22, and all of line 23 preceding the word "shall."

Mr. ELSTON. Mr. Chairman, I do not know of anything that has been the subject of more complaint in this country during the past few years than the practice of Government agencies in making regulations, and then acting as judge, jury, and executioner with respect to their enforcement. Congress has been largely to blame, because Congress has consistently given to these Government agencies the power and the authority to make such regulations and to enforce them. In a great many cases the agencies have exceeded the power extended by Congress, and in that respect, of

course, Congress is not to blame, but we will be at fault if we enact section 16 in its present form. If we do so, we will confer on the Atomic Energy Commission the power to make any kind of order or regulation it sees fit, within the sections of the bill referred to in this section. In subsection (b) of section 15 it is provided:

Whoever willfully violates, attempts to violate, or conspires to violate * * * any regulation or order prescribed or issued under sections 5 (b) (4), 10 (d), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than 2 years, or both.

If the act is committed with intent to injure the United States the penalty is much heavier.

This section, in my judgment, is unconstitutional, because the Supreme Court of the United States very definitely decided in the case of *Schechter v. U. S.* (295 U. S. 495), that Congress does not have the power to delegate to any agency of the Government lawmaking power unless Congress specifically lays down the policies and fixes the standards under which the regulations may be issued. We have not even attempted to do that. We simply give to this agency the power to make regulations or orders under certain sections of the bill and then provide that there may be prosecution and punishment for the violation of those orders. It is not even specified that the orders have to be in writing. Any kind of order that the Commission may make, within the authority of the sections mentioned, if violated, would subject the alleged offender to punishment. So if we pass this bill in its present form we will witness an extension of that much-criticized and un-American policy of charging American citizens with the violation of orders that they perchance never heard of. This section is a violation of the Constitution if the law as laid down by the Supreme Court of the United States in the *Schechter* case is still the law of the land.

The fact that we have not laid down the policies and established the standards requisite to conferring lawmaking authority upon the agency is just another reason why this bill should be re-committed to the Committee on Military Affairs for further study. Later on, after full consideration, if we want to confer on any agency the power to punish persons for violations of regulations and orders, we should fix the standards under which those prosecutions can be carried on. This will avoid such criticism as has been incident to prosecutions carried on by OPA and some other governmental agencies for a number of years.

The Military Affairs Committee did not have the time or the opportunity to set up any standards such as would be required if we were to make this act constitutional. This bill came to us from the other body and we were urged to report it out immediately. We were told to read the hearings before the committee. In other words, we were to place a rubber stamp on the bill and bring it to the House for consideration without amendment of any kind and without hearings. Some on the committee in-

sisted that we at least read the bill for amendment. Had that not been insisted upon, there would have been no amendments. I am not criticizing our chairman because he permitted the bill to be read. What I am seeking to point out is that we did not have the opportunity to give this bill the consideration it deserves. If we recommit it, it will have that consideration.

The CHAIRMAN. The time of the gentleman from Ohio has expired.

Mr. THOMASON. Mr. Chairman, I rise in opposition to the amendment.

The CHAIRMAN. The gentleman from Texas is recognized for 5 minutes.

Mr. THOMASON. Mr. Chairman, this amendment ought not to be adopted unless it is just a part of the general plan to kill or recommit the bill or wreck it with crippling amendments.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield.

Mr. ELSTON. I do not believe the gentleman wants to be unfair. There is no such idea as that in mind. We have offered amendments that have been adopted on the floor of the House time after time and the amendments that have been adopted were adopted because a majority of the members of the committee voted for them.

Mr. THOMASON. I do not want to be unfair, but I am taking the gentleman at his own word, because after he offered his amendment he said the thing to do is to recommit the bill. In other words, the big objective on the part of some seems to be to recommit the bill. That is all we hear. It seems to me, when it was admitted by those opposed to the bill at the beginning of the debate that it is perhaps the most important bill that has come up during this session of Congress or during the session of any Congress, because it involves the life and death of peoples of the world. It is our duty to meet this issue squarely. We have a solemn duty and should face it.

Mr. BROOKS. Mr. Chairman, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Louisiana.

Mr. BROOKS. The gentleman is a lawyer and a scholar, too. There is no law on the statute books at the present time regulating the handling of atomic energy. Does the gentleman feel no law is better for handling this matter than some law?

Mr. THOMASON. I disagree with what I am sure is the sincere conviction of my friends, especially those on the left, who want to recommit this bill. I certainly hope that does not happen. This bill ought to go to conference.

I do not know why the Congress of the United States, the House of Representatives and Senate, should not work its will and try to pass adequate legislation on this subject. You do not have to adopt any conference report if one should happen to come back here later. I do not think we should leave a power as tremendous as atomic energy in the hands of a few Army people when we are going to have a peace conference meeting in a few days, when we are having all these experiments out in the Pa-

cific and we are going to have some more. We want to try to get the atomic-energy proposition developed for peacetime pursuits, for the development of electrical energy, power, and medical research. To say that we will not give it some kind of study and make an effort to get some kind of bill into conference is beyond my comprehension.

Mr. Chairman, the gentleman from Ohio is not quite accurate as to what happened in the committee. I am certain that I am well within the truth when I say that for 6 weeks last fall we had hearings on the original so-called May-Johnson bill covering the entire field of atomic energy. Of course, it is a new subject, it is a great subject; nobody knows very much about it. When the Senate bill came to us a month ago, I must admit there was a deliberate filibuster in the committee, but even so, the filibuster succeeded until there developed a quorum. Every line in this bill was read. Amendment after amendment was offered to the bill. The gentleman from Ohio [Mr. ELSTON] and the gentleman from New Jersey [Mr. THOMAS] were always present demanding a quorum and when we lacked a quorum, a point of order was raised. So, nobody can say it has not had full and fair consideration.

The amendment now pending, offered by the gentleman from Ohio, would say that you set up a Commission, yet you will not give that Commission any power to issue regulations or to enforce its orders. I challenge you to go back into the history of this Government and find any department, whether it is the Interstate Commerce Commission, the Treasury Department, the Internal Revenue Department, the Commerce Department, Civil Aeronautics Authority, and many others that does not have the power to issue its own regulations and, also, the law carries with it the power of enforcement; otherwise there is no use having it for the simple reason you cannot write all details into the act itself.

Mr. Chairman, I sincerely hope the pending amendment will be defeated and that this bill will not be re-committed.

The CHAIRMAN. The time of the gentleman from Texas has expired.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this amendment and all amendments thereto do now close.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

Mr. THOMAS of New Jersey. Mr. Chairman, I object.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on the pending amendment and all amendments thereto close in 5 minutes, to be equally divided between the gentleman from New Jersey [Mr. THOMAS] and myself.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

The CHAIRMAN. The Chair recognizes the gentleman from New Jersey [Mr. THOMAS].

Mr. THOMAS of New Jersey. Mr. Chairman, I think at the present time there is a movement on foot to make certain that this bill will go to conference. If it goes to conference, there will be a tremendous difference of opinion between the Senate bill and the House version, and one of two or three things will take place. One is that the conferees will continue to sit almost indefinitely and the adjournment of the House will be delayed probably at least a week, because it is my guess that the Senate conferees, particularly one of them, would never agree to these things in the House version, and that some of the House conferees would never agree to some of the things in the Senate version.

So the only thing to do, as the gentleman stated, is to recommit this bill to the Committee on Military Affairs for continued study and to make certain also that we keep the bill locked up until such time as we see what the world peace picture will be like.

The CHAIRMAN. The Chair recognizes the gentleman from Kentucky [Mr. MAY].

Mr. MAY. Mr. Chairman, I do not care to discuss what a conference may do with respect to this legislation. But I would like to point out in defense of myself and my committee that we held 2 weeks of executive sessions, and I ultimately called a night session for the purpose of trying to get this legislation to the floor of the House, and that session was broken up by a filibuster.

What I want to say about the pending amendment is that section 5 (4) (B), section 10 (D), and section 12 (a) (2) refer to the question of reports relating to source material. They refer to records of activities of the Commission relating to civilian use of atomic energy. They relate to health and safety regulations. If those are not subjects on which the Commission ought to be permitted to write regulations, then the bill ought not to be passed, or anything at all in connection with it, because this is merely a simple, plain authorization of the Commission to do things that every other commission in the Government does without regard to the seriousness of the topic under consideration.

Mr. ELSTON. Mr. Chairman, will the gentleman yield?

Mr. MAY. I yield to the gentleman from Ohio.

Mr. ELSTON. I know the chairman wants to be fair in referring to the night session he has in mind, in which he said a filibuster occurred. Is not this the fact, that the chairman set the meeting at 7 o'clock and nobody made any move to even make a point of order that a quorum was not present until the time fixed by the chairman? The chairman indicated he would wait until 7:30, and the committee graciously waited until that time, and it was not until that time that the point of order was made that a quorum was not present, and a quorum was not present; is that not correct?

Mr. MAY. We were lacking one member of having a quorum, and about 1 minute before the gentleman from Connecticut [Mrs. Luce] entered the room certain members of the committee got up and walked out.

Mr. ELSTON. There was no assurance that we would have a quorum.

The CHAIRMAN. The time of the gentleman from Kentucky has expired. All time has expired.

The question is on the amendment offered by the gentleman from Ohio.

The question was taken; and on a division (demanded by Mr. ELSTON) there were—ayes 62, noes 45.

So the amendment was agreed to.

Mr. MICHENER. I move to strike out the last word.

Mr. Chairman, this debate has resulted in confusion worse confounded. I think everybody in the House, on the committee and off the committee, know less today about the bill than they thought they knew when debate began. It is a sad condition.

I have heard no one on or off the committee reporting the bill who is satisfied with it. Without any desire to be critical, I do not recall that any member of the committee has attempted to explain all its provisions. The debate has been illuminating but not clarifying. The close attention I have given to the debate has not helped much.

The McMahon bill has been widely propagandized. The average citizen knows little about it other than that it has the approval of certain person and certain groups, and that it was intended to assure civilian control, rather than military control, of atomic energy. I believe that most of the people in the country prefer civilian control. I am not unmindful of the fact that many of those addressing us within the last few days are convinced that for the present military control is preferable.

The fact that the Secretary of War and the military authorities appeared before the Military Affairs Committee and endorsed the McMahon bill as it came from the Senate is significant and persuasive, although in no sense conclusive.

It would appear that the longer the debate continues, the greater the uncertainty and the doubts arising in the minds of sincere, conscientious Members who want to do that which is best for our country in this crucial matter. Indeed, there is a growing sentiment in the House that the bill should be recommitment. In this case, as a practical matter, that means kill it now. There should be more consideration before the bill as reported, or the bill as amended, is placed on the statute books. That consideration can only be had in the Military Affairs Committee or in a conference committee composed of Members of the Military Affairs Committee of the House and the Military Affairs Committee of the Senate. This is the usual and the orderly procedure; that is, if this bill passes the House it will then go to conference for this needed reconsideration and re-writing. I usually favor such a course unless I want to kill a bill absolutely and put an end to its study.

I shall therefore vote to send the bill on to conference. It would seem that the debate has furnished abundant evidence that we will be doing an idle thing if we recommit the bill and have any serious expectation that it will come back to us in more acceptable form.

Mr. Chairman, it has been forcibly urged that time is not of the essence in disposing of this measure, and that inasmuch as there is so much confusion the wise course is to kill the bill and start all over again at some later date. If one is of that opinion, then a vote against the bill will make his position definite and understandable. The fact that a special committee in the Senate has worked long weeks on the Senate bill, that the House committee has done likewise, and that the Senate as a whole and the House in Committee of the Whole have freely changed and amended the bill, should have some weight in determining the course we are to pursue.

In these circumstances I am constrained to vote to pass the bill on to conference and against killing it. The final vote will then be on the conference report; that is, an opportunity will be given to vote for or against any bill which represents the result of an effort to compose the differences between the House bill and the Senate bill. There are many differences and they are vital. There is argument either way.

(Mr. MICHENER asked and was given permission to revise and extend his remarks.)

Mr. LANHAM. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. LANHAM: On page 48, line 11, after the figure "(3)", strike out "or", and after "6 (b)" insert "or 11 (g)."

Mr. LANHAM. Mr. Chairman, I am sure there will be no conflict about this amendment.

Mr. MAY. No; we have no objection to that amendment.

Mr. LANHAM. It simply makes the enforcement provisions applicable to the pertinent paragraph of the patent section.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Texas.

The amendment was agreed to.

The Clerk read as follows:

REPORTS

SEC. 16. The Commission shall submit to the Congress, in January and July of each year, a report concerning the activities of the Commission. The Commission shall include in such report, and shall at such other times as it deems desirable submit to the Congress, such recommendations for additional legislation as the Commission deems necessary or desirable.

With the following committee amendment:

Page 50, line 5, strike out "16" and insert "17."

The committee amendment was agreed to.

The Clerk read as follows:

DEFINITIONS

SEC. 17. As used in this act—

(a) The term "atomic energy" shall be construed to mean all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation.

(b) The term "Government agency" means any executive department, commission, independent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other estab-

lishment, in the executive branch of the Government.

(c) The term "person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent, or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions.

(d) The term "United States," when used in a geographical sense, includes all Territories and possessions of the United States.

(e) The term "research and development" means theoretical analysis, exploration, and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

(f) The term "equipment or device utilizing fissionable material or atomic energy" shall be construed to mean any equipment or device capable of making use of fissionable material or peculiarly adapted for making use of atomic energy and any important component part especially designed for such equipment or devices, as determined by the Commission.

(g) The term "facilities for the production of fissionable material" shall be construed to mean any equipment or device capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission.

With the following committee amendments:

Page 50, line 13, strike out "17" and insert "18."

Page 51, line 10, after "States" insert "and the Canal Zone."

The committee amendments were agreed to.

The CHAIRMAN. The Clerk will report the next committee amendment.

The Clerk read as follows:

Page 53, line 2, after "device", insert "peculiarly adapted for and."

Mr. VOORHIS of California. Mr. Chairman, I move to strike out the last word, in order to ask a question of the chairman of the committee.

If I read the text correctly, if the committee amendment on line 2 of page 52 is adopted, facilities for the production of fissionable material will have to be both capable of production of fissionable material and peculiarly adapted for that purpose. In other words, unless I am mistaken—and if I am, I want to be told so—the definition, if the committee amendment is adopted, would not cover a device which was capable of the production of fissionable material but which was not peculiarly adapted for such purpose. I wonder whether the committee did not really mean to say "peculiarly adapted for or capable of such production"? It seems to me that would make for good sense, but as it is, with the word "and" in there, it would not.

Mr. MAY. The committee felt that when it used the language "peculiarly adapted for and capable of such production" that would cover any equipment that was necessary to be used.

Mr. VOORHIS of California. I am afraid it will not.

Mr. MAY. It would not take away from a business concern something that might be made that could possibly be used for that purpose when it is not being so used.

Mr. VOORHIS of California. I think the gentleman is correct in what he just said, that it would not cover some method of producing fissionable material which was not peculiarly adapted for that purpose, but which might have been devised for some other purpose and later found to be capable of producing fissionable material.

Mr. MAY. The committee thought that it did not make any difference at all whether the word "and" was used or the word "or."

Mr. VOORHIS of California. I think it makes a great deal of difference, and I am therefore against the amendment.

Mr. McCORMACK. Mr. Chairman, I move to strike out the last two words.

Mr. Chairman, my purpose in rising is to urge that the bill be not recommitted, but that it be sent to conference. The passage of legislation in relation to the control of atomic energy is a matter of vital concern to our country. This bill is taking the regular legislative course that all legislation takes. It has been passed by the other body. It is now being considered by us and a large number of amendments have been put in the bill as a result of the exercise of the judgment of the majority of the Members of the Committee of the Whole. Of course, that is as it should be, under our form of government. No one can object to that procedure whether they agree with the amendments or not. That is the will of the majority. This is a bill not only of vital interest to the country but with far-reaching effects throughout the world. I hope the Members will not vote to recommit the bill but will send it to conference. I have refrained from saying much on the bill because I realized there were a lot of honest differences of opinion with respect to many aspects of the bill and with reference to many of the amendments that have been offered. I want to talk on what I consider to be the basic proposition involved here, which to me is the most important thing. We must think logically about the situation. This matter has been considered by the Committee on Military Affairs for many months. There were several weeks of hearings on the May-Johnson bill. When that was reported out I can testify as majority leader of the House that every effort was made to have the bill programmed at once. I would not agree to that. My friend, the gentleman from Kentucky, in carrying out the instructions of his committee, did everything he could. But I felt that this was a matter on which we had better hold back a little. I said, "Let us look into it further. A special committee has been appointed by the Senate and they have had extensive hearings on it."

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. McCORMACK. I yield.

Mr. MAY. If the bill goes to conference, the House will still have another

opportunity to pass on it if a conference report comes back?

Mr. McCORMACK. Absolutely.

I urge the membership not to recommit the bill. It would be an unwise step to take. It would be construed as the defeat of the bill. Technically, of course, we know that that is not so, but actually you and I know when a bill is recommitted, so far as any bill is concerned and so far as this bill is concerned, it is defeated. The passage of the bill is defeated. This bill has taken the ordinary course through legislative processes. It has passed the Senate. It is about to be acted upon in the House with a number of amendments. We all agree that something should be done. We are all in agreement on that basic proposition. Certainly, we must have confidence in the members of the conference committee on this bill the same as we have in the members of conference committees on other bills. All they can do is their best. They are representing both branches of the Congress. Whether I agree with a conference report or not, I have confidence in the men who represent the legislative body of which I am a Member and of the other body. They are doing the best they can. They are following the dictates of their judgment and their conscience. We ought to follow the regular ordinary course with reference to this bill.

Every one of us is in agreement that something should be passed. I hope the bill will not be recommitted.

Mr. COOLEY. Mr. Chairman, will the gentleman yield?

Mr. McCORMACK. I yield.

Mr. COOLEY. I would like the gentleman to tell us some sound reason why it should not be recommitted.

Mr. McCORMACK. That is not the question.

Mr. COOLEY. That is exactly the question.

Mr. McCORMACK. That is not the question. Can the gentleman give me any sound reasons why it should be recommitted?

Mr. COOLEY. Yes.

Mr. McCORMACK. What are they?

Mr. COOLEY. If I had the time I could give you a hundred reasons.

Mr. McCORMACK. You could give me a hundred emotional reasons, but the fact is the country needs this legislation.

Mr. COOLEY. Why?

Mr. McCORMACK. Why? It is of vital importance.

Mr. COOLEY. Why?

Mr. McCORMACK. Oh, why. There are a hundred reasons why it is of vital importance. Oh, it is easy to sit there and ask the question "Why?" I am surprised at the gentleman from North Carolina who ordinarily has better judgment than that. The important fact is that this bill has been considered by this committee for several days. It has been considered by the Military Affairs Committee for weeks. It is a matter of vital importance to send it along to the conference committee.

Is the gentleman opposed to some legislation to control atomic energy?

Mr. COOLEY. At this time; yes.

Mr. McCORMACK. Are you opposed to it at any time?

Mr. COOLEY. No; not at any time.

Mr. McCORMACK. The gentleman admits that legislation is necessary. The gentleman can take his own responsibility.

Mr. COOLEY. That is exactly what I am doing.

Mr. McCORMACK. The gentleman can take his own responsibility. The fact remains that if this bill is recommitted, as far as the country is concerned they will consider it a defeat of the bill, and the people of the country are justified in considering that if the bill is recommitted, the bill has been defeated.

The CHAIRMAN. The time of the gentleman from Massachusetts has expired.

The question is on the committee amendment.

The committee amendment was agreed to.

Mrs. LUCE. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, it seems perfectly plain to everyone in this House and in the Nation that there is confusion here about how to vote on this legislation. In passing, I have been reading the newspapers in the past 3 or 4 days, with close attention to their opinions and reporting of this subject, and I have yet to find anything in the papers which clarifies the Congress' mind about this legislation, and much calculated further to confuse them.

Mr. RIVERS. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. RIVERS. Will you please give the House the benefit of some of the reasons whereby you think it is so necessary at this time to pass this legislation?

Mrs. LUCE. I shall come to them later, although I have given them repeatedly during the course of this debate. Now the majority of the newspapers and their columnists, just like the Members, are often for or against this legislation, it seems to me in many instances, for altogether wrong reasons.

For example, there is one school that seems largely to advocate this bill as a peacetime measure for the cure of cancer and leukemia. Now, there happens to be a bill, H. R. 4502, on cancer research which has just been reported out of the Committee on Foreign Affairs of this House and I hope will be on the floor of this House today for our consideration, appropriating \$100,000,000 for experiments and research in cancer.

The bill concerns an effort wholly devoted to the search to defeat the dread disease. I intend to vote for it, and I hope with all my heart that everyone else will vote for it. But the bill before us is not a medical therapy bill. If its passage does eventually result in further beneficial research in cancer, it will only do so incidentally. The main reason for this bill is the defense of our Nation, and for no other reason should it be considered as urgent.

I intend at the proper place in the bill to offer an amendment providing that this act shall expire at the end of 7

years. Seven years, I believe, is a most generous length of time in which to find out whether this bill will work or whether it will not; whether we need it or whether we do not; whether it will fulfill all the promises for welfare that are made in its name for science; or, most important of all, whether it will operate in a free country in peacetime without constricting both scientific research and our political and economic liberties.

Mr. EATON. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield with great pleasure to our most distinguished colleague.

Mr. EATON. Will the lady please give us her judgment of what will become of the atomic bomb during the 7 years? Who will be in control of it?

Mrs. LUCE. I have just been asked by the gentleman from South Carolina to try to give some reasons for the urgency for the passage of this bill. I would feel in a weak position indeed if all I could say when asked that question was, Why that should be perfectly apparent; anybody ought to see why plainly. I believe that many Members of this House sincerely do not see why it is necessary. I will tell you why I think it is of great importance that we should pass a civilian-control bill now, although some provisions of the Senate bill have been stricken out that I would have left in and some put in that I would have left out, but the reason I think it is important to pass this bill is that, first, we must maintain and acquire complete control of the raw materials for making atomic bombs. Secondly, that control must be necessarily civilian, because civilian scientists and others who will be needed in a long-range atomic research and experiment plan just will not work in a brass-hat atmosphere. You can like it or not, but they will not work under such conditions.

Mr. HARNESS of Indiana. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. HARNESS of Indiana. Will the gentlewoman tell me why we cannot now obtain the materials for the manufacture of the atomic bomb just as well as if we had this legislation?

The CHAIRMAN. The time of the gentleman from Connecticut has expired.

Mrs. LUCE. Mr. Chairman, I ask unanimous consent to proceed for three additional minutes and to revise and extend my remarks.

The CHAIRMAN. Is there objection to the request of the gentleman from Connecticut?

There was no objection.

Mrs. LUCE. The gentleman's question was why can we not have Government control of raw materials?

Mr. HARNESS of Indiana. No; that was not what I asked. Under the present emergency legislation, war emergency legislation, we are in a position now to get all the materials necessary to manufacture the bomb.

Mrs. LUCE. There are a great many corporations, companies, and businesses which have materials to sell, or mine, in the atomic field. For example, thorium happens to be fissionable material. Today the people mining thorium do not

know whether to continue their operations or to stop them; they do not know whether to make contracts with the Army, or to wait and make contracts with some civilian authority, or whether they should make them under the old free-enterprise system; in fact, everybody who has fissionable material, plants, structures, or anything whatsoever to do with atomic energy is exactly in the same position the country is in about OPA now. There is confusion in the entire field owing to uncertainty about this legislation.

Mr. HARNESS of Indiana. That is because of the policy of the administration trying to force this bill through Congress at this time. If they adopted a definite policy I do not know why they could not get it. It must be mined in order to provide the material necessary for the manufacture of atomic bombs. We did it in war. We are still at war.

Mrs. LUCE. Yes; but the war acts must one day expire.

Mr. THOMAS of New Jersey. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. THOMAS of New Jersey. I wish to make two short observations. One is that we can buy the materials under the law we have on the statute books at the present time, the Strategic Material Stock Pile Act; the other is that if the main purpose of this bill is defense—

Mrs. LUCE. That is what I conceive is its proper purpose—defense; and I want an expiration date to it when there is genuine peace in the world.

Mr. THOMAS of New Jersey. If the main purpose is defense, then 7 years is too long.

Mr. VOORHIS of California. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield.

Mr. VOORHIS of California. There is a great deal of difference between the Government being able to buy enough fissionable material to make bombs with on the one hand, and having a commission able to prevent somebody from possessing fissionable material that may prove very dangerous, on the other hand. Is it not the second reason, even more than the first one, with which we should be concerned?

Mrs. LUCE. That is quite correct. There must be a consistent, intelligent, coherent control over the export ownership, and acquisition of fissionable material, and there also must be freedom to the scientists. I think there are provisions in this bill which are definitely socialistic in character. I consider that my position on this bill, that it is necessary to vote for it, while at the same time, I am concerned to point out its dangers in order to guard against them, is consistent.

The CHAIRMAN. The time of the gentleman from Connecticut has again expired.

Mr. BULWINKLE. Mr. Chairman, I rise in opposition to the pro forma amendment.

Mr. Chairman, I have heard during the debate here much talk about confusion and I have also heard much talk about recommitting the bill. The question was asked just a short time ago, Why the necessity for this bill?

May I not refer those who wish to know of the necessity for this bill to the hearings, and particularly Secretary of War Patterson whose evidence is on page 17:

In May 1945, in anticipation of the probable success of the atomic bomb and of the prospect of an early end of the war, the Secretary, with approval of the President, took steps to initiate a long-range policy on atomic energy. He appointed the following special committee to survey the subject and to submit it a program: Secretary Stimson, chairman; James F. Byrnes (then a private citizen); Will Clayton, Assistant Secretary of State; Ralph Bard, Under Secretary of Navy; George Harrison, Special Assistant to Secretary of War; Dr. Vannevar Bush, Chairman of the Office of Scientific Research and Development; Dr. Karl Compton, president, Massachusetts Institute of Technology; Dr. James Conant, president, Harvard University.

The special committee was assisted by a scientific panel drawn from the most eminent scientists working on the atomic energy project: Dr. J. R. Oppenheimer, Dr. E. O. Lawrence, Dr. Arthur H. Compton, Dr. Enrico Fermi.

This special committee made findings that are worthy of the attention of any man, the last one, No. 6, I should like to call your attention to, quoting:

The activities of the commission to be consistent with foreign policy and national defense as communicated to the commission by the President.

Are we, merely by a cursory view or reading of this bill and the hearings, going to stand before the country today and say that we will put up our puny minds on this subject against the great scientists of this country? Are we, who have not studied this problem, for political or other purposes going to stand here today and say that with a matter involving as much as this we will disregard everything that has been said by those who know and cast it all away, and then say we do not need this legislation?

Ah, my colleagues, before you come to your conclusion, let me pray in behalf of this country of ours that we all love that you give serious consideration to the work of the Senate committee, the House committee, and the scientists of this country.

Mrs. DOUGLAS of Illinois. Mr. Chairman, will the gentleman yield?

Mr. BULWINKLE. I yield to the gentleman from Illinois.

Mrs. DOUGLAS of Illinois. Is not one reason why we need at once a long-term program the retention of top-flight scientists and research workers? I had the privilege of visiting Oak Ridge in January, and the officers in charge insisted that the imperative need was to get at once a long-range program, because they were daily losing competent men on their staff, and without a plan they could not keep them.

Mr. BULWINKLE. Certainly, the lady is correct in her statement.

Mr. LANHAM. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. LANHAM: Page 50, line 16, insert a new subsection, as follows:

"The term 'nuclear fission' shall be construed to mean that process which takes place in nuclei wherein the nucleus is split into fragments, at least two of which con-

tain a substantial fraction of the mass of the original nucleus."

Mr. LANHAM. Mr. Chairman, nuclear fission is referred to all through the bill, and I think there should be a definition of it. This definition is probably correct; if not, it could be changed; but it certainly has the approval of a very distinguished gentleman who from the very beginning has been connected with all of the operations with reference to atomic energy.

Does not the chairman think that there should be some definition of it, since you are giving definitions of the various other terms mentioned in the bill?

Mr. MAY. I have no objection whatsoever to defining the term; and if it is not properly defined in the gentleman's amendment, that is another reason why it ought to go to conference, where we can sit down deliberately and see what the exact, proper definition is or whether this is proper or not.

Mr. LANHAM. But the conference would have no authority unless there was something in the bill by way of definition.

Mr. MAY. I think that is possibly true, and this will certainly give them an opportunity to do it.

Mr. Chairman, I have no objection to the amendment.

The CHAIRMAN. The question is on the amendment offered by the gentleman from Texas [Mr. LANHAM].

The amendment was agreed to.

Mr. MILLER of Nebraska. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, mankind has always been afraid of the unknown. Mankind was afraid of influenza when it struck this country during the last war. It has been afraid of all diseases until a remedy has been found. Mankind is today afraid of cancer. Why? Because its cause is unknown. Its cure is not certain.

I think a great deal of the confusion in this House over atomic energy can be placed directly at the door of the unknown quantity. Research is nothing more than reaching out into the unknown, taking something that we have not known about and bringing it down to practical application. The scientists in this age have reached out and tapped the field of atomic energy and the many problems involving it. It seems to me that this House ought to do the thing that will take atomic energy and then use it for the benefit of mankind. How that is going to be done, I do not know, and I do not think this House knows. There are many unknown roads to travel before we reach the ultimate end of what will happen with atomic energy. That is one cause of the confusion today. We cannot pull back the curtain of tomorrow and see just what is to happen with this new-found force. It is a great destructive power. It should be harnessed for the benefit of mankind.

I wish the bill could have more study, but I will not stand in the way of progress represented by this great new discovery.

As Members of Congress we ought to approach this problem with open minds,

with the hope of going down a road that will eventually take this great secret that scientists have reached out and brought down to us and use it for the benefit of the world. Perhaps we could outlaw atomic bombs in future wars. That would be ideal. Whether it can be done or not I do not know.

I heard the gentlewoman from Connecticut say that scientists would not work with the brass hats, or something like that, but I do not agree. Of course, scientific knowledge goes on regardless of this bill. I am not worried about whether cancer research will continue if we do not pass this bill. Scientists work, and have been working for years, on what causes cancer. Some day we may find out what causes cancer, we may find a cure for it. Neither do I think the knowledge of the atomic bomb will stay here in America. Science marches on and this knowledge of atomic energy will be universal. Scientists the world over are thinking along the lines of what atomic energy can do today. Other nations will have it, although they may have some difficulty in getting that intricate machinery that goes into the production of atomic bombs. But it does seem to me that with the peace conference to be held next week there perhaps is no hurry about passing this particular atomic-energy bill. What harm is there in waiting until the thing has had time to boil down and simmer a bit. Perhaps in 6 months we will be wiser and confusion will subside. The more you think about the unknown the less fearful you become about the unknown. If the bill is not recommitted for further study, I shall join with the majority and trust that, under the bill, science may march on and the powers and benefits of atomic energy will bring great benefits to the world.

(Mr. MILLER of Nebraska asked and was given permission to revise and extend his remarks.)

Mr. EATON. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, I have been sitting here through every hour of this debate. I do not claim to have as much intellectual equipment or scientific knowledge as many of my colleagues, but I have managed through the past 22 years once in a while to vote intelligently. That privilege is going to be denied me today.

I have three convictions as a result of these weary days: First, we have created the atomic bomb. It was done with our money and our scientists under military control at the time. That is our responsibility as a people and a government, the gravest responsibility that has ever rested upon a nation in the history of the world.

Second, I am convinced that it is a serious mistake to have kept this legislation until the dying hours of this session of Congress, when we are harassed to death with a thousand claims and calls and are looking to get away from here, and are unable to give the attention and time to it that we ought to.

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. EATON. I yield to the gentleman from Kentucky.

Mr. MAY. I call the attention of my friend, when he says it was a mistake to keep the legislation back to this late hour, to the fact that the House Committee on Military Affairs reported a bill on the subject the 7th day of last November and urged its early consideration. I do not think we ought to be blamed for what has happened, in view of the fact that the Senate bill came to us, and we commenced hearings on it immediately.

Mr. EATON. I am not blaming anyone, I am just stating a fact.

Lastly, I join with the very brilliant and beautiful lady from Connecticut, if she will allow me to join with her, in being completely confused. When a mind such as she possesses is confused, what can you expect of a mere man?

So I say today that no matter how I vote I have not the slightest idea whether I am voting wisely or unwisely. I am inclined to cut the Gordian knot by voting to recommit this bill to the committee.

Mr. HINSHAW. Mr. Chairman, will the gentleman yield?

Mr. EATON. I yield.

Mr. HINSHAW. The gentleman has been a very distinguished representative of this body at the San Francisco Conference and at other conferences of an international character. Can the gentleman give us the benefit of his wisdom as to the immediate need for passing this legislation?

Mr. EATON. I am not profoundly acquainted with the reasons to be presented in answer to that question, but I can conceive of no immediate urgency from the point of view of the international organization at this time.

Mr. WADSWORTH. Mr. Chairman, will the gentleman yield?

Mr. EATON. I yield.

Mr. WADSWORTH. Speaking of the alleged immediate urgency, the gentleman will recall that the War Department is now entering into contracts with universities for further research in this field so that research will not cease.

Mr. EATON. So you understand, then, that the urgency is not immediate?

Mr. WADSWORTH. It is not immediate; that is correct.

Mr. CHURCH. Mr. Chairman, will the gentleman yield?

Mr. EATON. I yield.

Mr. CHURCH. The gentlewoman from Connecticut has said that there was much of the socialistic in this bill. Does the gentleman not believe that in the next year there will be less of that trend in the then membership and in the country and that it is better to delay legislation on this question?

Mr. EATON. I do not see any immediate urgency for the passage of the bill.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this section and all amendments thereto do now close.

Mr. WILSON. Mr. Chairman, I object.

Mr. MAY. Mr. Chairman, I move that the debate on this section and all amendments thereto do now close.

The motion was agreed to.

The Clerk read as follows:

APPROPRIATIONS

SEC. 18. (a) There are hereby authorized to be appropriated such sums as may be

necessary and appropriate to carry out the provisions and purposes of this act. The acts appropriating such sums may appropriate specified portions thereof to be accounted for upon the certification of the Commission only. Funds appropriated to the Commission shall, if obligated by contract during the fiscal year for which appropriated, remain available for expenditure for 4 years following the expiration of the fiscal year for which appropriated. After such 4-year period, the unexpended balances of appropriations shall be carried to the surplus fund and covered into the Treasury.

(b) Such part as the President may determine of the unexpended balances of appropriations, allocations, or other funds available for expenditure in connection with the Manhattan Engineer District are hereby transferred to the Commission and shall be available for expenditure for the purpose of carrying out the provisions of this act.

Mr. CASE of South Dakota. Mr. Chairman, I make a point of order against subparagraph (b) on page 52, lines 18 to 23, inclusive, on the ground that it constitutes an appropriation and may not be reported by the Committee on Military Affairs, which is without jurisdiction to report appropriations. I am constrained to make this point of order, Mr. Chairman, for two or three reasons. The appropriations now carried in the War Department appropriation bill for \$375,000,000 were made in a larger amount than would have been made for 1 year only because the Budget request was for only \$200,000,000. The additional \$175,000,000 was added in place of contractual authorizations for obligations to mature in fiscal 1948. The total appropriation was made for the military features of the atomic service. It is now proposed that these appropriations be transferred for the purpose of carrying out the provisions of this act, which is much broader, providing for loans, providing for the development of civilian production and licensing, and many other features not contemplated in the appropriations for the Military Establishment. Consequently, this paragraph constitutes an appropriation, and I make the point of order that it may not be reported in this bill.

The CHAIRMAN. Does the gentleman from Kentucky desire to be heard on the point of order?

Mr. MAY. I do not, Mr. Chairman.

The CHAIRMAN (Mr. MILLS). The Chair is ready to rule. In the opinion of the Chair, the language referred to by the gentleman from South Dakota, beginning on line 18, page 52, and extending through line 23, is in violation of clause 4 of rule 21. Therefore, the Chair sustains the point of order.

Mr. MATHEWS. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. The gentleman will state it.

Mr. MATHEWS. What was the correct number of the section just read by the Clerk?

The CHAIRMAN. The Clerk had completed the reading of the bill through line 23 on page 52.

Mr. MATHEWS. But what is the correct number of the section just read?

The CHAIRMAN. The Clerk has not yet reported the committee amendment.

The Clerk will now report the committee amendment.

The Clerk read as follows:

Page 52, line 16, strike out "18" and insert "19."

The committee amendment was agreed to.

Mr. VOORHIS of California. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, as most Members know, I have opposed the amendments, with one or two exceptions, which have been adopted to this bill.

I rise at this time, none the less, to beg the House not to recommit it. The confusion that has been referred to is largely confusion that has been created—I shall not say deliberately—in the course of debate. The conception of the bill as it came to us from the Senate is absolutely clear to anyone who really wants to understand it.

It was almost a year ago that the first atomic bomb was dropped. A Member of this body, responsible for the welfare of the Nation, who, 1 year after that greatest event since the birth of Christ himself upon this earth, is willing to tell his constituents that he does not understand the over-all problems of it well enough to legislate upon them, strikes a blow at democratic Government itself. We must be able to deal with this our greatest problem if we are to prove that democratic parliamentary legislative Government can justify its continuance in the new and admittedly dynamic and in some respect fearsome age in which we live.

The question is, Do we have the courage to face the world as it is; not as we would like it, but as it is? A vote to recommit this bill means that domestic control over fissionable material and atomic energy will not be adopted at least until the Congress meets next year. Such a vote will be tantamount of cause to defeating the bill and will mean that sporadic possession and sporadic use of this most dangerous element ever to face mankind can go on. Such a vote will mean a repudiation, in effect, of the official position of this Government as laid before the other nations of the world in the Baruch Proposal for the international control of atomic energy, because, unless we here establish domestic control first, we cannot expect other nations to agree with us for international control. And unless that international control be established during the period of America's unquestioned pre-eminence in this field, our chance to get that international control will be minimized immeasurably, and a continuing atomic race becomes inevitable.

Furthermore, the choice and alternative that we face is briefly this, if this legislation is recommitted, this House puts its stamp of approval on a continued armament race in atomic weapons. We would be resting the fate of this Nation in some miraculous stopping of the minds of scientists in every other nation in the world. For we would fail to make provision, as every bit of competent evidence tells us we must, for the continuance of atomic energy development at home. In other words, if we recommit this bill, we fail to say that we will do everything within the power of this

House to stop an armament race in atomic weapons, and we will be saying instead that this House will have no part in what other agency of this Government has attempted and is striving to do, namely to get control in the hands of men over this engine of destruction, which otherwise will destroy him.

For my part, I am not willing to sell the future safety of my children and yours for any cheap political effort to save myself in the next few years. This is a matter for the ages. This House cannot turn this legislation down, Mr. Chairman, and be true to our duty.

For if we raise our sights even for a moment above the level of secrets that elementary reason teaches will be secret for only a moment of time, above the level of political slogans, about the level of the desires of some forces in this country for private profit—if we will raise our sights to the great stark facts we face we shall see beyond them but two visions, one is a vision of the four horsemen more terrible in mien than ever a World War I author could possibly paint them. The other is a vision of the stars themselves and the universe whence atomic energy has come, which of these visions will constitute the actual fact of our children and children's children, depends, believe me, on what we do in this solemn hour.

I cannot blame Members in the slightest for feeling this is most difficult; indeed, I cannot even blame them personally for wishing, as by their votes and speeches many of them have indicated they wished that atomic energy had never been released. But I can, and do most earnestly, beg them not to continue to commit their country's course on such a wish which they know is contrary to the basic facts of our life.

The CHAIRMAN. The time of the gentleman from California has expired.

(Mr. VOORHIS of California asked and was given permission to revise and extend his remarks.)

Mr. COOLEY. Mr. Chairman, I move to strike out the last word.

Mr. HINSHAW. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield.

Mr. HINSHAW. Will the gentleman tell me if any other nation of the world has transferred its atomic-energy program to the domestic field?

Mr. COOLEY. Not that I know of.

Mr. FOLGER. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. Very briefly.

Mr. FOLGER. What other nation has the atomic bomb besides this Nation?

Mr. COOLEY. I do not know of any.

Mrs. DOUGLAS of California. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield.

Mrs. DOUGLAS of California. The question was asked if any countries had transferred their atomic-energy program underneath civilian control. The English have their entire program underneath civilian control, and the Army or the Navy does not appear anywhere in their program.

Mr. COOLEY. I hope the lady's answer is satisfactory to the gentleman who propounded the question.

I asked the majority leader to give the House one sound reason why this bill

should not be recommitted. I did not do that with the idea of bringing about any embarrassing situation to him because he had the floor. In the hours and hours of debate I have listened for some sound reasons to be given by someone as to why it was not wise to recommit this bill.

Mr. WILSON. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I do not know whether the gentleman can give us any sound reason or not, but if he can, I am very glad to yield to him.

Mr. WILSON. The chairman of the committee just a few moments ago made the statement that this bill was reported out of the Committee on Military Affairs 8 months ago and had not been acted upon. Can anyone tell me now why there should be such haste to act upon it, when 5 months from now we will be back in session again?

Mr. COOLEY. I agree with the gentleman.

Mr. BLOOM. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield.

Mr. BLOOM. I merely want to say that the very interesting speech made by the gentleman from California, I think, gives more than one reason why this bill should not be recommitted.

Mr. COOLEY. No, it does not. The gentleman from California did not give any reason except—

Mr. VOORHIS of California. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield.

Mr. VOORHIS of California. The first reason is to make sure that America continues to get fissionable material in the future.

The second reason is to prevent that fissionable material from getting scattered all over the Nation with people using it for all sorts of purposes.

The third reason is to establish a continuous centralized control in the hands of this Commission to prevent that thing from happening.

The fourth reason is that if you are going to talk at all about getting that international control then the first thing you have got first to do is to have domestic control.

The first reason is that the most distinguished people who studied this question, the scientists, the economists, the chiefs of staff, the President of the United States, the State Department, and everybody else who knows anything about it has told you that it was necessary to act now.

Mr. COOLEY. Now, to sum up the reasons that have just been given by the gentleman from California, he apparently is very much afraid at the present time that the secrets of the atomic bomb are being given away or that research in the field is being retarded or will soon be abandoned and that all of the scientists will cease to work on this newly discovered, mysterious, and most terrific of all powers. He recites the fact that others have been giving thought and consideration to the matter, that great scientists have worked on it, that the Military Affairs Committee members have considered it. I believe, and I hope he will agree, that the secret is

now being safely guarded; research is continuing and will not be impeded and will not be abandoned.

Mr. DINGELL. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield to the gentleman from Michigan.

Mr. DINGELL. The gentleman has asked why we should pass this? Will the gentleman state precisely why he is opposed to favorable action at this time?

Mr. COOLEY. Mr. Chairman, I ask unanimous consent to proceed for five additional minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from North Carolina?

There was no objection.

Mr. COOLEY. Mr. Chairman, I will be very glad to tell the gentleman why I am opposed to it. The secret now is adequately safeguarded, it should be safeguarded, and should remain as a military secret until peace documents have been written and signed. We should hold this weapon of war.

I do not believe it has been recognized or established as a cure for cancer. The gentleman from Minnesota, Dr. Judd, has not yet established his theory of mutating the species by radioactivity, on which the charming lady from Connecticut commented yesterday.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I yield to the gentleman from Connecticut.

Mrs. LUCE. I had not at that time read Dr. Judd's exceedingly brilliant explanation of the processes of mutation as they appear in yesterday's RECORD. You will find there a complete description as to radioactivity in this field and how it may have brought about the creation of dinosaurs and other monsters in prehistoric times.

I want to say also that I welcome this opportunity to say that my own remarks on the subject were a humorous attempt to focus attention on the incredible potentialities of radioactive energy. If we do not control the bomb, it might be a good thing for someone to mutate the species, so we could all escape from it, and change us into groundhogs or moles or, better still, provide us with wings, because I am sure it would be nice to have them here. If we do not stop devising weapons of slaughter, we are not likely to have wings in the hereafter, that is certain.

What is much to be preferred to the mutation of the species is that we should all begin to use the gray matter and the brains with which the Lord so abundantly provided us many millions of years ago. If we will use our brains on this matter, we need not worry about mutation of the species, because we will not take any risks with human life, and we will send this bill to conference.

Mr. DINGELL. Mr. Chairman, will the gentleman yield?

Mr. COOLEY. I want to answer the gentleman's question.

Mr. DINGELL. The gentleman stated that he feared the possible disclosure of secrets if this is placed in the hands of a commission. Is there anything in the bill that threatens any such possibility?

Mr. COOLEY. I do not think we need to take any others in with us to help share the secrets of the atomic bomb. I regard the atomic bomb as one of the greatest instrumentalities of death ever devised by the genius of man. You do not have to guess about it. All you have to do is to go to Nagasaki and Hiroshima and see the results of it there. If we are going to remain strong, if this is an instrumentality of defense, then pray tell me why should we give it up?

Mr. DINGELL. We are not giving it up.

Mr. COOLEY. Why should we be so anxious to let Russia or any other nation on earth know the secrets of this deadly weapon that we have in our hands? I would like to ask a question of the gentleman from California. Does the gentleman believe that if the situation were reversed and Russia had possession of this secret that she would give us full information about it?

Mr. VOORHIS of California. No; and I do not believe that there is a line or a dot in this bill that proposes to give it to anybody, and if there were, I would be against the bill. What there is in this bill is the establishment of the kind of control in the hands of a commission that will make it clear and to prevent that happening until such time as we have international control over it.

Mr. COOLEY. What is the gentleman's objection to the present method of control? What is the gentleman's objection to guarding it with soldiers and controlling it as it is now being controlled?

Mr. VOORHIS of California. The present method of control does not extend at all to development throughout the country. The present method of control, as I explained over and again in the debate, does not reach fissionable material in the hands of any Tom, Dick, and Harry in this Nation. It does not prevent the development of production of any weapon that anybody may want to produce.

Mr. COOLEY. My friend seems to be alarmed over the possibility that fissionable material may fall into the hands of individuals or private corporations and that such individuals or corporations might make greater strides in development and production than will be made under our present set-up, and he seems to be under the impression that this newly created Commission will guard more carefully both the material and its development. This is about the frankest expression that I have heard in support of the bill. Technically, we are still at war, and certainly, no individual or corporation would dare attempt to seize upon fissionable material or undertake experiments which would clash with the plans and programs of the armed forces. This is a deadly instrumentality, and it should be dealt with in deadly fashion. The atomic bomb was the weapon that ended, suddenly, the world's greatest conflict. While it destroyed human life, it likewise saved human life, because it ended the war. It was a climax to cruelty. Certainly it is not unreasonable to argue that atomic energy as a weapon of war or defense should be perfected before diverting our attention and the attention

of scientists to a discovery of other peacetime uses in which it may be developed.

Is this bill an act of appeasement? Are we being forced by diplomatic pressure to surrender "the big stick," the atomic bomb, before even our allies will discuss the terms of peace? This country is tired of appeasement. This country is tired of pussyfooting. We should be more determined and insist upon free, frank, and open discussions. What do we know about Russia's postwar programs, demobilization plans, or experiments in the field of atomic energy? Will the passage of this bill cause Russia and other nations to abandon all experiments and discharge all scientists and abandon their exploratory efforts or even to submit to international control the information which they have obtained thus far? Why, Russia will not even permit American military men or civilians into Korea or into certain sections of Manchuria. It is not even safe for Members of this Congress to fly over territory which is now occupied by the Russians. They have not accorded us even the privileges of cooperation and understanding. There is constantly a tense feeling in China, and especially in the northern portion of that poverty-stricken nation. In China we seem to be playing both ends against the middle. We are told that we are equipping and supplying both armies—the army of the Central Government and the army of the Communists. Our men are still wondering why they are in China. They know that the war is over and they want to know why they are not permitted to return home. General Marshall has been given the world's greatest and most difficult diplomatic assignment, but I venture the assertion that there are areas with which he is dealing into which he would not even be permitted to travel in search of pertinent information. What kind of partnership is this? With what kind of ally are we dealing? Not even the members of our great Military Affairs Committee know anything at all about Russia's postwar programs, and yet we are about to run the risk of surrendering the greatest military secret of all times and even before the terms of peace have been agreed upon. Yes; I am for control of all the secrets of the atomic bomb and will continue to be for the control of such secrets until the terms of peace have been agreed upon and adequate international machinery has been provided for the future control of all phases of the development in the field of atomic energy.

The CHAIRMAN. The time of the gentleman from North Carolina has expired.

Mr. MAY. Mr. Chairman, I move that all debate on this section and all amendments thereto do now close.

The motion was agreed to.

Mr. CASE of South Dakota. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. CASE of South Dakota:

Page 52, line 13, strike out "four years" and insert "one year."

Page 52, line 13, strike out "four-year" and insert "one-year."

The CHAIRMAN. The question is on the amendment offered by the gentleman from South Dakota.

The amendment was rejected.

The CHAIRMAN. The Clerk will read.

The Clerk read as follows:

SEPARABILITY OF PROVISIONS

SEC. 19. If any provision of this act, or the application of such provision to any person or circumstances, is held invalid, the remainder of this act or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be effected thereby.

With the following committee amendment:

Page 53, line 2, strike out "19" and insert "20."

The committee amendment was agreed to.

Mr. MATHEWS. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mr. MATHEWS: On page 53, after section 20, insert the following new section:

"PERFORMANCE OF CERTAIN ACTS"

"SEC. 21. Whenever by the provisions of this act any license is necessary, any act required or any act prohibited, which license cannot be procured or which act cannot reasonably be done or refrained from for the reason that the Commission is not fully organized, staffed, and functioning, then such license shall not be necessary, or such act required or prohibited until the President, by proclamation, shall declare that the Commission is fully organized, staffed, and functioning."

And renumber the last section to be section 22 accordingly.

Mr. MATHEWS. Mr. Chairman, I conceive this to be a most important and practical amendment. It takes care of the situation which I endeavored to point out to this committee day before yesterday, that the moment you pass the act and the President signs it, no one can do certain acts, possess certain materials or facilities without either the approval of, or a license issued by, the Commission. I pointed out at that time and I repeat emphatically that by the time the President appoints this Commission and it is confirmed by the Senate, and additionally, as I suggested the day before yesterday and as you have now put into this bill by amendment, there might properly be and now must be an investigation by the FBI of all the proposed personnel to be put in this bureau, it will be months and months or a year, perhaps, before this Commission is functioning and can give its approval to anything or issue its license for anything. What happens in the meantime to the people who have produced this atomic bomb and who are working on this thing?

Mr. MAY. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. As soon as I have explained the amendment.

Mr. MAY. The gentleman asked what happens in the meantime. I want to tell him what will happen.

Mr. MATHEWS. As soon as I finish my statement I will be glad to yield to the chairman of the committee.

How can these people proceed in an orderly fashion to keep abreast of the development of the uses of these things in industry, which is for the good of mankind, as explained by the proponents of the bill, if they have to have a license from a commission which does not exist or the approval of a commission which does not exist, to continue that very work which it is our purpose to keep up so that we may keep abreast of and, in fact, ahead of the rest of the world?

Perhaps the chairman has an answer, but to my mind if this bill is passed without such an amendment as this you are not only going to throw the industry engaged in this work into terrible confusion, so that they will not know what they can do or cannot do, but you will have subjected them to the punishment of fine and imprisonment for violation of the act. I think an amendment of this kind ought to and must be adopted if you are to save the very people who are developing this industry for you.

Now I yield to the chairman of the committee to answer that question.

Mr. MAY. The answer to the question is that in the interim covered by the gentleman's amendment it may be possible for large industries or small industries or anybody in the world to buy up and corner all the fissionable material in the country and then hold it for a fabulous price from the Government.

Mr. MATHEWS. That does not answer the question I have raised. What about legitimate people who are now using this in their business and who will continue to use it for the benefit of mankind? What about the situation spoken of by the gentleman from New York, the investigation and the possession of these materials in the meantime under contract with the Government? Yet this act, passed later than any other act, says they cannot do it without the approval of or a license from a commission which does not exist and will not exist for some time. You will create the greatest legal difficulties I ever saw, in my opinion, unless you adopt this amendment.

Mr. WHITE. Mr. Chairman, will the gentleman yield?

Mr. MATHEWS. I yield to the gentleman from Idaho.

Mr. WHITE. I wonder if the chairman of the committee knows that another committee of the House has reported out a bill to take possession of the ores in the ground wherever they exist?

Mr. MATHEWS. I would not know, but that might or might not be a practical proposition.

[Mr. KOPPLEMANN addressed the Committee. His remarks will appear hereafter in the Appendix.]

Mr. McDONOUGH. Mr. Chairman, I move to strike out the last five words.

Mr. Chairman, I have refrained from speaking on the bill during the time that we have debated it because there is evidently a great deal of confusion in the minds of many here as to the advisability of this legislation at all. On the other hand, there is no question about the fact that science is going to stop its experiments and research whether this

legislation is passed or not. I am inclined to believe the Senate certainly must have had in mind the protection of the Nation and its natural resources and the dangers of this atomic energy if it were released promiscuously, when they passed this bill. On the contrary, we have amended the bill to such an extent that it is now in such a state that it is doubtful whether we all believe the things that we have added to the bill. One of the amendments which I am particularly concerned about which was adopted here a few moments ago on a voice vote, was the definition of nuclear fission. The gentleman who offered the amendment may have been sincere in his intentions, but the definition of nuclear fission in a bill passed by the Congress will carry a great deal of authority. If it is not properly defined, it is going to be a matter of ridiculousness in the minds of the public, or it is going to be looked upon as the correct definition of nuclear fission, whether it is correct or not. I recommend that this bill go to conference and that the conferees consider the definition of nuclear fission as defined in the Smythe report which is much more scientifically correct, if there is going to be any definition of nuclear fission in the bill at all.

Mr. HINSHAW. Mr. Chairman, will the gentleman yield?

Mr. McDONOUGH. I yield.

Mr. HINSHAW. I think the House should understand that my distinguished colleague from California is a chemical engineer. His words are of value at this time.

Mr. McDONOUGH. I thank the gentleman. I have spent years in chemistry, in metallurgy, in the manufacture of steel and aluminum, and in explosives in the manufacture of nitroglycerin, nitro-starch, and tetra-nitro-anilin before entering public service when atomic energy was revealed as an explosive. I became vitally interested in and have done considerable study on the subject. It is a highly scientific subject. It is difficult to legislate on. Scientific research and development should not be curtailed by legislation. It is an inherent characteristic of men and women of science to use their talent for the good of mankind, not for destructive purposes. Most of the progress we have made in extending life and making living more comfortable has come from scientific research and development.

I do not want to appear as an expert on atomic energy, although I appreciate the reference of my colleague because, although the revolution of atomic energy is new, in science it is as old as the hills. We have only discovered the uses of it. The defense that we are trying to protect against here is a defense for and from destructive purposes. We certainly should do nothing by legislation that would interfere with the development research and uses of atomic energy for the industries, the arts, and sciences.

Mr. COOLEY. Mr. Chairman, will the gentleman yield?

Mr. McDONOUGH. I yield.

Mr. COOLEY. The gentleman from Texas [Mr. LANHAM], in offering the amendment, confessed that he was not

convinced that the definition was accurate, but he merely put it in the bill so that the conferees could discuss it later.

Mr. McDONOUGH. I appreciate that. I am only adding my contribution to it so that the conferees may have it before them. I believe the definition in the Smythe report is as accurate as you can define it. I think we have the framework of a good bill here and I do not think it should be thrown out altogether. It should go to conference. I doubt very much if the secret about which we are all talking—as a matter of fact there is no secret in the creation and formation of atomic energy. There is a secret with reference to the specific destructive force that it produces. No private corporation will get hold of that. They will not spend the amount of money necessary to develop it for that purpose. We are protecting that secret with as much security as we have in the Army and Navy and the FBI.

Mr. DINGELL. Mr. Chairman, will the gentleman yield?

Mr. McDONOUGH. I yield.

Mr. DINGELL. The gentleman's idea of the Smythe suggestion is an excellent one, but let me ask the gentleman this question: Is there anything in this bill that will disclose the secret to anyone outside of these United States?

Mr. McDONOUGH. I may say to the gentleman, I am concerned about the broad powers that are given to the Commission, and the added personnel that would be developed under the Commission, and the fact that if you allow these things to go through too many minds, they are likely to leak out and get into the wrong channels. As it is now, I have every confidence the Army is protecting the secret.

The CHAIRMAN. The time of the gentleman from California has expired.

(Mr. McDONOUGH asked and was given permission to revise and extend his remarks.)

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this section and all amendments thereto close in 10 minutes.

The CHAIRMAN. Is there objection to the request of the gentleman from Kentucky?

There was no objection.

Mr. TIBBOTT. Mr. Chairman, I ask unanimous consent to extend my remarks.

The CHAIRMAN. Is there objection to the request of the gentleman from Pennsylvania?

There was no objection.

Mr. TIBBOTT. Mr. Chairman, from the standpoint of my duty as a Member of this body and to justify my position on this bill, it is my conscientious belief that this measure should be returned to the committee for further study and consideration. While I realize that there are many who believe that the committee's bill on atomic energy should be adopted now, nevertheless, it seems to me that we are acting in too much haste. I have arrived at this conclusion after listening carefully to the arguments both for and against the bill. As the situation stands I cannot give the bill my support as there are so many confusing pro-

visions in it that, to my way of believing, do not give our country the protection to which we are entitled. For the time being and until peace is restored throughout the world, I am of the firm belief that the secrets of the atomic bomb should be kept entirely within the confines of our own Nation. Until such time as the committee brings in additional evidence in support of their position, I am compelled to vote against the passage of the bill before us.

The CHAIRMAN. The gentleman from Kentucky [Mr. ROBSION] is recognized.

Mr. ROBSION of Kentucky. Mr. Chairman, we have all watched with interest the efforts of our country to build a just and lasting peace and to set up an organization that would prevent aggression and the horrors and burden of wars in the future. But in that effort backed by our administration and the heart, soul, and mind of the American people we have seen our efforts frustrated from time to time so that we were unable to write a workable charter and we have been unable to bring the countries together to write or agree upon a treaty of peace. The country that has obstructed all the way, all the time, has been Russia. It has created a spirit of alarm in this country and we are continuing to draft teen-agers and keep and maintain 1,600,000 of our boys in foreign lands and in camps here and on the seven seas of the world, at great expense to our Nation. This year with a deficit facing the country the Congress has already voted the enormous sum of \$12,000,000,000 for the Army and the Navy. This is one-half of the cost of World War I. The administration says all this is necessary. Why? They claim that there is danger. Russia is the threat. Now, if it is so necessary to draft our teen-agers and keep large armed forces throughout the world and spend \$12,000,000,000 this year to strengthen our military and naval power, we must guard zealously our atomic secret today. We must not, while the world is in turmoil, make it possible for any potential enemy to obtain this war secret, the most powerful aggressive and defensive weapon the American people have? I have heard throughout this debate expressions of doubt as to how far we should go. The bill has been greatly amended and I think improved. But it is still not clear what type of men will be appointed on that Commission or the persons who will make up the large number of personnel. There could be a leak. Now, without a peace treaty, with a world still technically at war, shall we give away this mighty secret weapon? I am in favor of recommitting this bill and giving more time for study.

Russia is not surrendering any of her military secrets; she has rejected all plans submitted by us and other peace-loving nations. This secret—know-how—of the atomic bomb is in the safe-keeping of our military with other secrets. This is the most priceless of all. We know and the world knows we are a peace-loving Nation and will not use it except in our own defense and to preserve the peace of the world, but what will happen if some other nations get

possession of this secret before a treaty of peace is signed and there is still discord throughout the world.

This bill as amended sets up a Commission of civilians and one military man. They do not have the right to give away our atomic bomb secret. The Congress and the American people should be vigilant. Some delay until Congress meets next January would give time to determine if the world's problems can be solved in a peaceful way, and we can know more about Russia's attitude.

The CHAIRMAN. The time of the gentleman from Kentucky has expired.

The gentleman from North Carolina [Mr. FOLGER] is recognized for 5 minutes.

Mr. FOLGER. Mr. Chairman, I can hardly understand what is going on in the House. It is the strangest situation from any point of view that the mind can conceive, if one has a mind, as to why a concerted, apparently well-developed campaign should be put on in this body to destroy this legislation. Is it politics? I would not make that accusation. I do not wish even to think that even in the inmost private recesses of my soul.

Mrs. LUCE. Mr. Chairman, will the gentleman yield?

Mr. FOLGER. I yield.

Mrs. LUCE. I do not think anybody in this House would dream of accusing anybody in this House of jeopardizing millions of lives and perhaps civilization itself for political reasons. There is not a man that low in this House. If there were he should be shot.

Mr. FOLGER. The gentlewoman has stated about what I have stated, that not in the inmost recesses of my soul would I think such a thing. Then, is it due to the fact that many of us have failed to inform ourselves on this subject, when the President of the United States, the Secretary of War, the Secretary of the Navy, the State Department, the scientists who discovered atomic energy have asked for this legislation? It was not an invention, it was a discovery, for nuclear energy has been here all the time. We just have discovered it and made ourselves able to apply it.

I want to read you a fine statement, and, as my opinion, the following:

The carefully considered measure for control of atomic energy passed by the Senate has now been warped beyond all recognition. The chance we may have if we subscribe to that view is that in the conference we may unwarp some of these things that have been, in my opinion, thoughtlessly injected into this legislation.

On the pretext of preserving secrecy, the House has voted to void the principle of civilian rule, as though Americans are not to be trusted simply because they do not wear a uniform. And then, by way of making ludicrous even its own pretenses, the House voted to make secrecy impossible by eliminating the Senate provision for a Government monopoly in the atomic field and providing, instead, for private patents to develop the most potent force the world has ever known. This vital legislation must not now be killed.

The House has a positive obligation to act, however inadequately. If it does so, perhaps something that makes sense can be worked out in conference with the Senate. If it fails to act the Army will be left in the stultifying control which has already driven the men of science from the field. What is at stake is far too urgent, far too vital to the Nation and to the world, to be settled by craven default.

It is admitted that in this bill it is not expected we can pass a perfect piece of legislation and we may under necessity, from time to time, to offer and adopt amendments to it; but I suggest to the Members of the House that this bill, as it comes to us from the Senate, is as nearly a perfect answer to the obligation of the United States, to its own citizens and the rest of the world, as the mind of man can conceive under the circumstances. A postponement of this would be a likely disaster to the Nation and probably to the world. Men and women, I plead that you may not scuttle this important bill.

The CHAIRMAN. The time of the gentleman from North Carolina has expired.

The question is on the amendment offered by the gentleman from New Jersey [Mr. MATHEWS].

The question was taken; and on a division (demanded by Mr. MATHEWS) there were—ayes 32, noes 67.

So the amendment was rejected.

The Clerk read as follows:

SHORT TITLE

SEC. 20. This act may be cited as the "Atomic Energy Act of 1946."

With the following committee amendment:

Page 53, line 9, strike out "20" and insert "21."

The committee amendment was agreed to.

Mrs. LUCE. Mr. Chairman, I offer an amendment.

The Clerk read as follows:

Amendment offered by Mrs. LUCE: On page 53, after line 10, insert the following:

"DURATION OF ACT

"SEC. 22. (a) Except as provided in subsection (b), the provisions of this act shall expire 7 years after the date of enactment of this act.

"(b). (1) The provisions of this section shall have no force or effect if, at the expiration of the 7-year period referred to in subsection (a), the United States is then engaged in war with any other nation.

"(2) One day prior to the expiration of this act all property owned by the Commission and described in paragraphs (1) and (2) of section 9 (a) shall be transferred to such agency of the Government as may be designated by act of Congress, and after such transfer no such property shall be disposed of by the agency so designated except pursuant to provisions of law enacted after the date of enactment of this act specifically authorizing such disposition."

Mrs. LUCE. Mr. Chairman, it seems to me that there is little confusion about the character of the Senate bill before amendment. But many are confused about whether or not we should vote for it. We are torn between a distaste for the vast dictatorial domestic powers it confers on the five-man commission, and

our fears that without it we shall endanger our national security in a troubled world.

When scientists read the debate on this floor they will no doubt be appalled by our ignorance of the subject of nuclear energy, and the silly unscientific things we have said about it. But when we read some of the things scientists say about the purpose and effect of domestic legislation, they also sound a little silly to us. We are ignoramuses in their field, but they are not exactly Daniel Websters in our. If the world were at peace we could each stick to our own last. But it is not, unhappily. The threat of war has combined in this bill the scientists' field and ours. I apologize to the scientists for any of my scientific errors or malapropisms in this debate, which natural ignorance of the subject occasioned. But none of us owe any apology to the scientists for telling them that this bill is pure socialism. Indeed they should thank us for it, for of all men American scientists passionately love liberty. It is the liberty they have enjoyed in the past which has enabled us to grow great as a scientific nation. It is the business of a legislator to point out to them, and all the people, just what effect this law may have on their liberties, when peace comes. Moreover, I do not see why any Member should be criticized for stating a fact which the able Senator from Connecticut, a man of intellectual integrity, stated himself several times—that this bill is unprecedented, unique, and that it should never set a precedent for any other legislation. So, in saying that its unique and unprecedented aspect is precisely its totalitarian aspect, I am only repeating what Senator McMAHON and his committee developed in their hearings, and in the few hours of debate the Senate had on the matter.

Is it wrong for a legislator to be honest with the people? I have been honest, in any case, about what I thought this bill signified for the Nation's future, if it stays on the books when the long international crisis that brought it into being is past. I have been equally honest in saying that I agree with the Senators, and I agree with our Members who think that although this is very bad medicine—socialistic medicine—indeed, the strongest dose of it that this Congress has ever been asked to take, for the world's ills and our own sins, we must nevertheless take it.

But I am now offering an amendment to this bill which will let it expire at the end of 7 years, in the event that we do not find ourselves in a war at that time with any foreign power.

Mr. Chairman, we need this bill, not to advance scientific research in time of peace, for we could continue to advance science as we have done during our whole history without it, under a free system. Remember, our scientists produced nuclear fission without any such bill as this. The reason we need the bill now, if we will be honest with ourselves, is that we are afraid of dangers from abroad, and need to safeguard and develop our supremacy in atomic weapons until that fear is passed.

Seven years is a very long time. In 7 years all of the questions that concern me, and have concerned the gentleman from California [Mr. Voorhis], whose reasons for accepting this legislation are the same as I have repeatedly given—will be answered. We will know the answer to whether or not we will have a world authority to control atomic weapons, for example. We will know whether our hopes for peace are well founded, or whether war is inevitable.

Yes; I agree with all those who have said during this debate that they favor a large measure of civilian control while there is the threat of war, and even a certain measure of civilian control even in times of peace to guard against serious accidents in the industrial use of fissionable materials. We must have civilian control, so long as there is any possible threat of war, of raw materials, over-all production of facilities, and the means to induce scientists to continue research; and in peace we must prevent disastrous accidents to our people. But if the dangers of such wide legislation as this in peacetime are now clearly seen by this House, as the result of this debate, then let us give ourselves a chance to get the atomic commissariat we have created, because of our fears about a third world war, off our necks, if those fears should mercifully cease to materialize and peace should come.

Let us not, because of our temporary fears of foreign totalitarianism, plunk for permanent domestic totalitarianism ourselves, when those fears are passed.

We shall regret it if we wed ourselves permanently to this vast and mysterious socialistic enterprise.

Again, please remember why we are passing this bill—it is as a defense measure in a troubled world. When the world subsides into a creative peace we will not need it.

To keep it permanently on our books is to despair of peace in the next decade.

Have we no hope for the future? Do we really believe that war between ourselves and Russia is inevitable? Are we certain, beyond any hope, that the peoples of the world will all be hurling atomic bombs at one another in 5 or 10 years? Are we despairful of the efforts of our statesmen ever to make the UN a going concern, to achieve world control of armaments, or better still, a world in which no nation will desire armaments because they are free, contented, and prosperous?

Are we really committed in our hearts and minds to an unending bomb race? Do we really believe that there is no way out of the dreadful stalemate and impasse we find ourselves in but annihilation between the nations?

If we do believe all these things, if we can see nothing but certainty of war as a solution for the international problems that confront us, then there is a real excuse for making this legislation permanent. But if that is our belief, what you and I do here will not be long remembered, it will be soon forgotten. The very archives in which we place this bill, and this building itself will be destroyed in an atomic war. No, it won't much matter then what we say or do here

today. Then those who have shined on this floor will shine in the milky way. And none of us will be able to say to the other, "I told you so." For we will all be atomized.

But, if there is a hope for peace—and I dare to believe there is a hope—then let us support this amendment, which would cross this measure off our books in peacetime and allow our people to return to the free development of all our energies, including our atomic energy.

The CHAIRMAN. The time of the gentlewoman from Connecticut has expired.

Mrs. LUCE. Mr. Chairman, I ask unanimous consent to proceed for three additional minutes.

The CHAIRMAN. Is there objection to the request of the gentlewoman from Connecticut?

There was no objection.

Mr. McDONOUGH. Mr. Chairman, will the gentlewoman yield?

Mrs. LUCE. I yield to the gentleman from California.

Mr. McDONOUGH. Does the gentlewoman believe that if atomic energy had been revealed to the world not as a destructive force there would be any necessity for this legislation?

Mrs. LUCE. I doubt if this legislation would ever have been proposed if this form of energy, which can be so very beneficial to humanity had been released in a nondestructive or industrial form. This legislation is the result of atomic energy having first been released before the public in the form of a decisive weapon and because, until our relations with Soviet Russia are free of mutual suspicions, we must take every precaution to safeguard that weapon, and, if need be, develop it.

Mr. McDONOUGH. And we wish to protect ourselves against the use of it on us for destructive purposes.

Mrs. LUCE. That is correct. We are scared of being destroyed by it if other nations get ahead of us in the development of it. The urgent need to prevent that is why I am for this bill.

Mr. McDONOUGH. The gentlewoman believes that is the principal need for this legislation?

Mrs. LUCE. That is the principal need for the bill. And when we are no longer faced with the threat of war, we will not need this bill. War with Russia is not inevitable. If we use half the brains that God gave us we will not have a war with Russia. We do not want a war with Russia. What the nations need is not so much atomic control as self-control. We would not need to worry over the destructive potentialities of nuclear fission if we all worried a little more over the destructive and evil ideas released by the minds and hearts of men. In the final analysis, if the peoples of the Nation will not seek the answers to atomic energy by consulting the authority of God, no world authority will ever be able to prevent its use for the mutual annihilation of nations. But I refuse to despair of the wisdom or piety of our statesmen. I refuse to despair of what may yet be done in the field of atomic and other disarmament in the United Nations Organization, based on the achievement of a

peace with justice. So, because I do not believe in the inevitability of war, and I do believe in the possibility of peace, I want to see an expiration date in this act.

Mr. DURHAM. Mr. Chairman, I rise in opposition to the amendment.

Mr. Chairman, I do not exactly understand the gentlewoman's position in offering this amendment. She states that it is bad legislation, very bad. Still, she is offering an amendment here to make this legislation effective for seven long years. If this is bad legislation, it should not last for 7 years.

In this bill is a provision for a Joint Committee on Atomic Energy, with 11 members from this body and 11 members from the body at the other end of the Capitol. All matters pertaining to fissionable material, nuclear fission, and everything else that has to do with the manufacture of atomic energy, has to be referred to this committee for consideration. This committee can initiate legislation at any time it wants to. Congress is in session or will be in session every 2 years, for how long, we do not know. I feel it is unwise to enact this legislation for seven long years. The first part of the amendment I think is already the law. This spells it out, and there is no objection to it. But the latter part of it setting up the act for seven long years is what I object to.

Miss SUMNER of Illinois. How long does it last under the bill?

Mr. DURHAM. There is no limit to it. The Congress always has the authority to repeal any act it sets up here at any time if they care to repeal it. The gentlewoman says that anyone who is opposed to this amendment either believes in war or believes in some kind of socialistic state. I think my record here will show that I voted for the security of my country on every measure affecting our security. I do not believe in a socialistic state. I hope we do not have a war. That is the reason I am here at the present time and why all during the consideration of this bill I have fought for it as the gentleman from California clearly stated a few minutes ago. I think he has presented one of the best reasons for adopting this measure and sending it to conference than any man who has taken the floor. There is not just one reason, gentlemen, for this measure. I do not like all features of this bill. You never get everything you like in these matters, but it is absolutely necessary, in my opinion. It is one of the ingredients of the prescription that we must hand out to the world in order to come to an agreement and peace. You are not going to get anywhere in the negotiations, in the United Nations Organization or the Security Council, until we adopt some domestic program in regard to the atomic energy. I hope the House will send this bill to conference.

The CHAIRMAN. The time of the gentleman has expired.

Mr. MAY. Mr. Chairman, I ask unanimous consent that all debate on this section, and all amendments thereto close in 5 minutes, the last minute to be reserved for myself.

Mr. JUDD and Mr. LAFOLLETTE objected.

Mr. HAYS. Mr. Chairman, I move to strike out the last word.

Mr. Chairman, the gentlewoman from Connecticut needs no defense by me in her behalf. When she pleasantly stated a while ago that she was confused it seems to me that statement does not conform to the nature of the debate in the last 2 or 3 days. I think the gentlewoman from Connecticut has made it very clear that she entertains a strong conviction on this question of our defense being involved in an assertion of policy at this critical hour. I follow her in her logical arguments in her speeches. I am sorry she has emphasized the word "socialism" in referring to the bill, but that is incidental. I doubt it can be supported. But the gentlewoman from Connecticut is absolutely right when she implies and states in fact that it is an attitude of defeatism if we refuse to do anything at all about this tremendous new power that has been turned loose in the world. I, for one, am not going to have less faith in the scientists who uncovered this new force than they had in us when at the time it was discovered they said it was a good thing—weigh these words—that the thousands of people lost their lives at Hiroshima if as a result of that dramatic happening the people of America in their position of leadership would realize that action was necessary to keep this tremendous new power under control. The scientists said they had faith in the people acting through their representatives to declare a policy on that question. Now, we do not declare a policy and we accomplish nothing if we leave it uncontrolled with no declaration at all on this question. If we believe that the military with no mandate from us are going to exercise some control over the holding of fissionable material, we are in my judgment deluding ourselves.

The first discovery was made in an institution in this city, an institution that I love, because I attended school there in night sessions for 3 years. When a reporter rushed out of that room and said they had found a new element, under conditions that no one but a trained scientist could understand, that great discovery was made. Except for the fact that a war followed in a short time after that, we would not be discussing this now, and it would be a matter of concern only to those of high technical training.

I wonder if in all history a thing like that has happened; if contemporaneously with the discovery of a thing like that, we were advised of the terror that its use fraught. I wonder if we are able to know what was taking place in the field of science.

So the point is, beginning here in George Washington University and then terminating by the destruction of 60,000 people, the question is, will the Congress assert a policy and say that perhaps that power may be put to use for peace and industrial needs, and that they have faith in the scientists who will be appointed under this bill to properly use that power?

The CHAIRMAN. The time of the gentleman from Arkansas has expired.

Mr. MAY. Mr. Chairman, I move that all debate on this section and all amendments thereto do now close.

The motion was agreed to.

The CHAIRMAN. The question is on the amendment offered by the gentle-

woman from Connecticut [Mrs. LUCE].

Mr. RANKIN. Mr. Chairman, may we again have the amendment reported?

The CHAIRMAN. Without objection, the Clerk will again report the amendment.

There being no objection, the Clerk again reported the amendment offered by the gentlewoman from Connecticut [Mrs. LUCE].

The CHAIRMAN. The question is on the amendment offered by the gentlewoman from Connecticut [Mrs. LUCE].

The question was taken; and on a division (demanded by Mr. MARTIN of Massachusetts) there were—ayes 49, noes 108.

So the amendment was rejected.

By unanimous consent, the pro forma amendments were withdrawn.

The CHAIRMAN. Under the rule, the Committee rises.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr. MILLS, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee having had under consideration the bill (S. 1717) for the development and control of atomic energy, pursuant to House Resolution 708, he reported the same back to the House with sundry amendments adopted in the Committee of the Whole.

The SPEAKER. Under the rule, the previous question is ordered.

Mr. THOMAS. Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER. The Chair will count. [After counting.] Two hundred and sixty-five Members are present, a quorum.

Is a separate vote demanded on any amendment?

Mr. BRADLEY of Pennsylvania. Mr. Speaker, I demand a separate vote on the so-called Lanham amendment dealing with the section regarding patents.

The SPEAKER. Is a separate vote demanded on any other amendment? If not the Chair will put them en grosse.

The question is on the amendments.

Mr. MARCANTONIO. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were refused.

Mr. MARCANTONIO. Mr. Speaker, I demand a division.

Mr. HARNESS of Indiana. Mr. Speaker, a parliamentary inquiry.

The SPEAKER. The gentleman will state it.

Mr. HARNESS of Indiana. What are we voting on now?

The SPEAKER. The Chair stated twice that we are voting on the amendments en grosse except the Lanham amendment.

The question was taken; and on a division (demanded by Mr. MARCANTONIO) there were—ayes 116, noes 114.

Mr. MARCANTONIO. Mr. Speaker, I demand tellers.

Tellers were refused.

So the amendments were agreed to.

The SPEAKER. The Clerk will report the amendment upon which a separate vote has been demanded.

The Clerk read as follows:

Amendment offered by Mr. LANHAM: Pages 34, 35, 36, 37, 38, 39, 40. Strike out all of the patent provisions commencing with line 5

on page 34 down to and including line 18 on page 40 and substitute in lieu thereof the following:

"SEC. 11. (a) The Commission is authorized to purchase, for the manufacture or use by or for the United States Government, any and all rights in and to any invention or discovery, or application for patent or patents thereon, relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy.

"(b) The Commission is authorized to condemn, and to determine and make just compensation for, any and all rights in and to any invention or discovery relating to research on or the production of fissionable materials or the utilization of fissionable materials or atomic energy that affects the national defense and security: *Provided, however,* That upon the determination by the Commission that the national defense or security is no longer involved, any and all rights in and to such invention or discovery shall revert to the owner, subject to a nonexclusive, irrevocable and nontransferable license in favor of the Government.

"(c) When any person who has made an invention or discovery relating to research on or the production of fissionable material, or the utilization of fissionable materials or atomic energy and shall have filed an application for a patent thereon and shall have tendered his invention or discovery to the Government of the United States for its use, he shall, if and when he ultimately receives a patent, have the right to sue for compensation as provided for in this section, such right to compensation to begin from the date of any use of the invention by the Government: *Provided,* That the Commission is authorized to enter into and effect an agreement with said applicant in full settlement and compromise for the use of his invention by the Government.

"(d) If any person is dissatisfied with the determination of the Commission as to just compensation, he may have his remedy by filing a suit in the United States District Court for the District of Columbia, if filed within 6 months after such determination; and such court, on notice to the Commission and other due procedures had, may thereupon determine the amount of the compensation to be paid such person, as the facts in the case may appear: *Provided,* That in any such suit the United States may avail itself of any and all defenses, general and special, that might be pleaded by a defendant in an action for infringement, as set forth in title 60 of the revised statutes, or otherwise. Any final judgment rendered against the Commission under any provision of this section shall have like force and effect as a money judgment rendered against the United States by the Court of Claims in a suit in respect of which the United States has expressly agreed to be sued; and the amount of any such final judgment shall be paid out of any appropriation applicable to the case, if any such there be; and when no such appropriation exists, said judgment shall be paid in the same manner as judgments rendered by the Court of Claims in cases under its general jurisdiction.

"(e) Any party aggrieved by any final judgment in a proceeding under this section may appeal therefrom to the Court of Appeals of the District of Columbia, and upon such appeal said court shall have power to review said judgment and affirm, revoke, or modify the same as upon appeals in other actions at law.

"(f) Attorneys appointed by the Commission may appear for and represent the Commission before any Government agency or judicial tribunal with respect to any and all invention, patent, and research matters in which the Commission is involved.

"(g) Any person who has made, or hereafter makes any invention or discovery utilizing fissionable materials or atomic energy designed or specially adapted for use as or in

a military weapon, shall file with the Commission a report containing a complete description thereof. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (1) The sixtieth day after the date of enactment of this act; (2) The sixtieth day after completion of such invention or discovery; or (3) the sixtieth day after such person first discovers, or first has reason to believe that such invention or discovery is specially useful as or in such a weapon."

Mr. LANHAM (interrupting reading of the amendment). Mr. Speaker, this is the amendment with reference to the patent provisions of this bill. It has been spoken on, it has been printed two different times in the RECORD, it is a rather lengthy amendment, and I therefore ask unanimous consent that further reading of the amendment be dispensed with.

The SPEAKER. Is there objection to the request of the gentleman from Texas?

There was no objection.

The SPEAKER. The question is on the amendment.

The question was taken; and on a division (demanded by Mr. BRADLEY of Pennsylvania) there were—ayes 151, noes 90.

Mr. BRADLEY of Pennsylvania. Mr. Speaker, I ask for the yeas and nays.

The yeas and nays were refused.

So the amendment was agreed to.

The SPEAKER. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

Mr. SHORT. Mr. Speaker, I offer a motion to recommit.

The SPEAKER. Is the gentleman opposed to the bill?

Mr. SHORT. At this time I am, Mr. Speaker.

The SPEAKER. The Clerk will report the motion to recommit.

The Clerk read as follows:

Mr. SHORT moves to recommit the bill (S. 1717) to the Committee on Military Affairs for further study.

The SPEAKER. Without objection, the previous question is ordered.

There was no objection.

The previous question was ordered.

The SPEAKER. The question is on the motion to recommit.

Mr. SHORT. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The question was taken; and there were—yeas 146, nays 196, not voting 88, as follows:

[Roll No. 228]

YEAS—146

Abernethy
Allen, Ill.
Andersen,
H. Carl
Andresen,
August H.
Arends
Arnold
Barden
Bates, Mass.
Beall
Bennett, Mo.
Bishop
Blackney
Bolton
Breim
Brown, Ohio
Brumbaugh
Buffett

Butler
Campbell
Carlson
Case, S. Dak.
Chenoweth
Chiperfield
Church
Clevenger
Clippinger
Cole, Mo.
Cole, N. Y.
Cooley
Corbett
Cunningham
Curtis
D'Ewart
Dondoro
Dworshak
Eaton

Elliott
Ellis
Ellsworth
Elston
Fellows
Fenton
Fulton
Gathings
Gavin
Gearhart
Gerlach
Gifford
Gillette
Gille
Goodwin
Graham
Grant, Ind.
Griffiths
Gross

Gwinn, N. Y.
Gwynne, Iowa
Hagen
Halleck
Hancock
Harness, Ind.
Hess
Hoeven
Hoffman, Mich.
Hoffman, Pa.
Holmes, Mass.
Horan
Howell
Jenkins
Jennings
Jensen
Johnson, Ill.
Johnson, Ind.
Jones
Jonkman
Kean
Kelly, Ill.
Klnzer
Knutson
Kunkel
Landis
Lanham
Latham
LeFevre
Lemke
Lewis

McConnell
McCowan
McKenzie
Martin, Mass.
Merrow
Miller, Nebr.
Mundt
Murray, Tenn.
Norblad
O'Hara
Pace
Philbin
Phillips
Pickett
Pittenger
Plumley
Rankin
Reed, Ill.
Reed, N. Y.
Rees, Kans.
Rich
Rivers
Rizley
Robertson,
N. Dak.
Robston, Ky.
Rockwell
Rodgers, Pa.
Roe, Md.
Rogers, Mass.
Schwabe, Mo.

Schwabe, Okla.
Scribner
Shafer
Sharp
Short
Simpson, Ill.
Simpson, Pa.
Smith, Ohio
Springer
Stefan
Stockman
Sumner, Ill.
Sundstrom
Taber
Talle
Taylor
Thomas, N. J.
Tilbott
Vursell
Wadsworth
Weichel
White
Whitten
Wigglesworth
Wilson
Winstead
Winter
Wolcott
Wolverton, N. J.
Woodruff

NAYS—196

Almond
Andrews, Ala.
Angeli
Auchincloss
Baldwin, N. Y.
Barrett, Pa.
Barrett, Wyo.
Barry
Bell
Bender
Biemiller
Bland
Bloom
Bonner
Bradley, Pa.
Brooks
Brown, Ga.
Bryson
Buchanan
Buck
Buckley
Bulwinkle
Byrne, N. Y.
Camp
Canfield
Cannon, Mo.
Carnahan
Case, N. J.
Celler
Chapman
Chef
Clark
Clason
Clements
Cole, Kans.
Colmer
Combs
Cresser
D'Alessandro
Davis
Dawson
Delaney,
James J.
Dingell
Dirksen
Dolliver
Doughton, N. C.
Douglas, Calif.
Douglas, Ill.
Doyle
Drewry
Durham
Eberharter
Elsaesser
Engle, Calif.
Ervin
Fallon
Feighan
Fernandez
Fisher
Fannagan
Flood
Fogarty
Folger
Forand
Gallagher

Gamble
Gardner
Gary
Geelan
Gordon
Gore
Gorski
Granahan
Granger
Grant, Ala.
Green
Gregory
Hale
Hall,
Leonard W.
Hand
Harris
Havener
Hays
Healy
Hedrick
Heffernan
Henry
Herter
Heseltan
Hill
Hinshaw
Hobbs
Hoch
Hook
Hope
Huber
Hull
Jackson
Jarman
Johnson, Calif.
Judd
Kearney
Kee
Keefe
Kefauver
Kelley, Pa.
King
Kopplemann
LaFollette
Lane
Lea
LeCompte
Lesinski
Link
Luce
Lyle
Lynch
McCormack
McDonough
McGlinchey
McGregor
McMillen, Ill.
Madden
Maloney
Manasco
Marcantonio
Martin, Iowa
Mathews
May
Michener

Mills
Monroney
Morgan
Morrison
Murdock
Murray, Wis.
Nceiy
Norrell
O'Brien, Ill.
O'Brien, Mich.
O'Neal
Outland
Patman
Patterson
Peterson, Fla.
Poage
Pratt
Price, Fla.
Price, Ill.
Quinn, N. Y.
Rabaut
Rabin
Rains
Ramey
Randolph
Rayfield
Resa
Richards
Riley
Robertson, Va.
Rogers, Fla.
Rogers, N. Y.
Rooney
Rowan
Russell
Ryder
Sabath
Sadowski
Sasscer
Savage
Sheppard
Sikes
Smith, Maine
Smith, Va.
Smith, Wis.
Somers, N. Y.
Spence
Starkey
Stevenson
Stigler
Sullivan
Summers, Tex.
Thom
Thomas, Tex.
Thomason
Towe
Trimble
Voorhis, Calif.
Vorys, Ohio
Wasielewski
Weaver
Whittington
Woodhouse
Worley
Zimmerman

NOT VOTING—88

Adams
Allen, La.
Anderson, Calif.
Andrews, N. Y.
Bailey

Baldwin, Md.
Bates, Ky.
Beckworth
Bennet, N. Y.
Boren

Boykin
Bradley, Mich.
Bunker
Byrnes, Wis.
Cannon, Fla.

Cochran	Hendricks	Patrick
Coffee	Holifield	Peterson, Ga.
Cooper	Holmes, Wash.	Pfeifer
Courtney	Izac	Ploeser
Cox	Johnson, Okla.	Powell
Cravens	Johnson, Tex.	Priest
Crawford	Keogh	Reece, Tenn.
Curley	Kerr	Robinson, Utah
Daughton, Va.	Kilburn	Roe, N. Y.
De Lacy	Kilday	Sheridan
Delaney,	Kirwan	Slaughter
John J.	Klein	Sparkman
Domengeaux	Larcade	Stewart
Earthman	Ludlow	Talbot
Engel, Mich.	McGehee	Tarver
Fuller	McMillan, S. C.	Tolan
Gibson	Mahon	Torrens
Gillespie	Mankin	Traynor
Gossett	Mansfield,	Vinson
Hall,	Mont.	Walter
Edwin Arthur	Mansfield, Tex.	Welch
Hare	Mason	West
Harless, Ariz.	Miller, Calif.	Wickersham
Hart	Norton	Wolfenden, Pa.
Hartley	O'Konski	Wood
Hébert	O'Toole	

Cole, Kans.	Henry	Peterson, Fla.
Colmer	Herter	Philbin
Combs	Heseltun	Plumley
Corbett	Hill	Poage
Crosser	Hinshaw	Pratt
Cunningham	Hobbs	Price, Fla.
Curtis	Hoch	Prigg, Ill.
D'Alesandro	Hoeven	Quinn, N. Y.
Davis	Hoffman, Pa.	Rabaut
Dawson	Holmes, Mass.	Rabin
Delaney,	Hook	Rains
James J.	Hope	Ramey
Dingell	Horan	Randolph
Dirksen	Howell	Rayfiel
Dolliver	Huber	Rees, Kans.
Domengeaux	Hull	Resa
Dondero	Jackson	Richards
Doughton, N. C.	Jarman	Riley
Douglas, Calif.	Jennings	Robertson,
Douglas, Ill.	Jensen	N. Dak.
Doyle	Johnson, Calif.	Robertson, Va.
Drewry	Judd	Robson, Ky.
Durham	Kearney	Rockwell
Eaton	Kee	Rodgers, Pa.
Eberhart	Keefe	Roe, Md.
Elliot	Kefauver	Rogers, Fla.
Ellsworth	Kelley, Pa.	Rogers, N. Y.
Elsasser	King	Rooney
Engle, Calif.	Kopplemann	Rowan
Ervin	Kunkel	Russell
Fallon	LaFollette	Ryder
Feighan	Lane	Sabath
Fernandez	Latham	Sadowski
Fisher	Lea	Sasser
Flannagan	LeCompte	Savage
Flood	LeFevre	Sharp
Fogarty	Lesinski	Sheppard
Folger	Link	Sheridan
Forand	Luce	Short
Fulton	Lyle	Sikes
Gallagher	Lynch	Smith, Maine
Gamble	McConnell	Smith, Va.
Gardner	McCormack	Smith, Wis.
Gary	McDonough	Somers, N. Y.
Gathings	McGlinchey	Spence
Gearhart	McGregor	Starkey
Gedlan	McKenzie	Stefan
Gerlach	McMillen, Ill.	Stevenson
Gifford	Madden	Stigler
Gillette	Maloney	Stockman
Goodwin	Manasco	Sullivan
Gordon	Marcantonio	Sumners, Tex.
Gore	Martin, Iowa	Talle
Gorski	Martin, Mass.	Taylor
Graham	Mathews	Thom
Granahan	May	Thomas, Tex.
Granger	Merrow	Thomason
Grant, Ala.	Michener	Tibbott
Green	Miller, Nebr.	Towle
Gregory	Mills	Trimble
Gwinn, N. Y.	Monroney	Voorhis, Calif.
Gwynne, Iowa	Morgan	Vorys, Ohio
Hale	Morrison	Vursell
Hall,	Mundt	Wadsworth
Edwin Arthur	Murdock	Wasielewski
Hall,	Murray, Wis.	Weaver
Leonard W.	Neely	White
Halleck	Norrell	Whittington
Hand	O'Brien, Ill.	Wigglesworth
Harris	O'Brien, Mich.	Wolcott
Havenner	O'Hara	Wolverton, N. J.
Hays	O'Neal	Woodhouse
Healy	Outland	Worley
Hedrick	Patman	Zimmerman
Heffernan	Patterson	

NAYS—79

Abernethy	Gillie	Pickett
Andersen,	Grant, Ind.	Pittenger
H. Carl	Griffiths	Rankin
Andresen,	Gross	Reed, Ill.
August H.	Hagen	Reed, N. Y.
Arnold	Hancock	Rich
Barden	Harness, Ind.	Rivers
Bates, Mass.	Hess	Rizley
Bennett, Mo.	Hoffman, Mich.	Rogers, Mass.
Bishop	Jenkins	Schwabe, Mo.
Brehm	Johnson, Ill.	Schwabe, Okla.
Buffett	Johnson, Ind.	Scrivner
Bland	Jones	Schaffer
Bloom	Jonkman	Simpson, Ill.
Bolton	Kean	Simpson, Pa.
Bonner	Kelly, Ill.	Smith, Ohio
Bonner	Kinzer	Springer
Bradley, Pa.	Knutson	Sumner, Ill.
Brooks	Landis	Sundstrom
Brown, Ga.	Lanham	Taber
Brown, Ohio	Lemke	Thomas, N. J.
Brumbaugh	Lewis	Welch
Bryson	McCowan	Whitten
Buchanan	Murray, Tenn.	Wilson
Buck	Norblad	Winstead
Buckley	Pace	Winter
Bulwinkle	Phillips	Woodruff
Butler		

NOT VOTING—86

Adams	Gibson	Mason
Allen, La.	Gillespie	Miller, Calif.
Anderson, Calif.	Gossett	Norton
Andrews, N. Y.	Hare	O'Konski
Bailey	Harless, Ariz.	O'Toole
Baldwin, Md.	Hart	Patrick
Bates, Ky.	Hartley	Peterson, Ga.
Beckworth	Hébert	Pfeifer
Bennet, N. Y.	Hendricks	Ploeser
Boren	Holifield	Powell
Boykin	Holmes, Wash.	Priest
Bradley, Mich.	Izac	Reece, Tenn.
Bunker	Johnson, Okla.	Robinson, Utah
Byrnes, Wis.	Johnson, Tex.	Roe, N. Y.
Cannon, Fla.	Keogh	Slaughter
Cochran	Kerr	Sparkman
Coffee	Kilburn	Talbot
Cooper	Kilday	Tarver
Courtney	Kirwan	Tolan
Cox	Klein	Torrens
Cravens	Larcade	Traynor
Crawford	Ludlow	Vinson
Curley	McGehee	Walter
Daughton, Va.	McMillan, S. C.	Welch
De Lacy	Mahon	West
Delaney,	Mankin	Wickersham
John J.	Mansfield,	Wolfenden, Pa.
Earthman	Mont.	Wood
Engel, Mich.	Mansfield, Tex.	
Fuller		

So the bill was passed.

The Clerk announced the following pairs:

On this vote:

Mr. Bennet of New York for, with Mr. Ploeser against.

Mr. Byrnes of Wisconsin for, with Mr. Fuller against.

Mr. Johnson of Texas for, with Mr. Mason against.

Mr. Bailey for, with Mr. Kilburn against.

Mr. Keogh for, with Mr. Bradley of Michigan against.

Mr. Pfeifer for, with Mr. Hartley against.

Additional general pairs:

Mr. Hart with Mr. Holmes of Washington.

Mr. Walter with Mr. Adams.

Mr. Hébert with Mr. Gillespie.

Mr. Izac with Mr. Anderson of California.

Mr. Wood with Mr. Engel of Michigan.

Mr. John J. Delaney with Mr. Crawford.

Mr. Vinson with Mr. Andrews of New York.

Mrs. Norton with Mr. O'Konski.

Mr. Allen of Louisiana with Mr. Reece of Tennessee.

Mr. Klein with Mr. Welch.

Mr. Curley with Mr. Talbot.

Mr. Bunker with Mr. Wolfenden of Pennsylvania.

Mr. KNUTSON changed his vote from "yea" to "nay."

Mr. CHURCH changed his vote from "yea" to "nay."

Mr. LATHAM changed his vote from "nay" to "yea."

The result of the vote was announced as above recorded.

A motion to reconsider was laid on the table.

Mr. THOMASON. Mr. Speaker, I ask unanimous consent that the Clerk in enrolling the amendments be instructed to make the necessary corrections in section and subsection numbers and letters, and in cross-references, and on page 43 strike out lines 8 to 13, inclusive.

The SPEAKER. Is there objection to the request of the gentleman from Texas?

There was no objection.

GENERAL LEAVE TO EXTEND

Mr. THOMASON. Mr. Speaker, I ask unanimous consent that all Members may have five legislative days in which to revise and extend their remarks on the bill just passed.

So the motion to recommit was rejected.

The Clerk announced the following pairs:

On this vote:

Mr. Ploeser for, with Mr. Bennet of New York against.

Mr. Fuller for, with Mr. Byrnes of Wisconsin against.

Mr. Mason for, with Mr. Johnson of Texas against.

Mr. Domengeaux for, with Mr. Walter against.

Mr. Kilburn for, with Mr. Bailey against.

Mr. Bradley of Michigan for, with Mr. Klein against.

Mr. Hartley for, with Mr. John J. Delaney against.

General pairs until further notice:

Mr. Hart with Mr. Talbot.

Mr. Keogh with Mr. Holmes of Washington.

Mr. Sheridan with Mr. Adams.

Mr. Hébert with Mr. Edwin Arthur Hall.

Mr. Pfeifer with Mr. Anderson of California.

Mr. Priest with Mr. Gillespie.

Mr. Izac with Mr. Engel of Michigan.

Mr. Holifield with Mr. Andrews of New York.

Mr. Coffee with Mr. Crawford.

Mrs. Norton with Mr. O'Konski.

Mr. Vinson with Mr. Reece of Tennessee.

Mr. Curley with Mr. Welch.

Mr. O'Toole with Mr. Wolfenden of Pennsylvania.

Mr. BUFFETT changed his vote from "nay" to "yea."

The result of the vote was announced as above recorded.

A motion to reconsider was laid on the table.

The SPEAKER. The question is on the passage of the bill.

Mr. THOMASON. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The question was taken; and there were—yeas 265, nays 79, not voting 86, as follows:

[Roll No. 229]

YEAS—265

Allen, Ill.	Bland	Byrne, N. Y.
Almond	Bloom	Camp
Andrews, Ala.	Bolton	Canfield
Angell	Bonner	Cannon, Mo.
Arends	Bradley, Pa.	Carlson
Auchincloss	Brooks	Carnahan
Baldwin, N. Y.	Brown, Ga.	Casc, N. J.
Barrett, Pa.	Brown, Ohio	Case, S. Dak.
Barrett, Wyo.	Brumbaugh	Celler
Barry	Eryson	Chapman
Beall	Buchanan	Chelf
Bell	Buck	Chenoweth
Bender	Buckley	Clark
Biemiller	Bulwinkle	Clason
Blackney	Butler	Clements

DIGEST OF
CONGRESSIONAL PROCEEDINGS
OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF BUDGET AND FINANCE
Legislative Reports and Service Section
(For Department staff only)

Issued July 23, 1946
For actions of July 22, 1946
79th-2nd, No. 144

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HIGHLIGHTS: House received conference report on price-control measure; to come up today on floor. Sen. Wherry discussed meat price and supply situation. Rep. Murray discussed general farm situation.

HOUSE

- 1. PRICE CONTROL.** Received the conference report on H. J. Res. 371, to extend and amend the Price Control and Stabilization Acts (pp. 9777-87).
As reported from conference, the measure provides as follows: Continues these Acts until June 30, 1947, in modified form. Requires the President to recommend, by Jan. 15, 1947, any necessary legislation to establish policies to supplement price control. Requires the President, by Apr. 1, 1947, to report to Congress any price controls which will be necessary after June 30, 1947. Requires the Price Administrator, by Dec. 31, 1946, to decontrol non-agricultural commodities not important to business or living costs, and to provide for prompt removal of controls when supply and demand are balanced. Requires the Secretary of Agriculture, on the first day of the first month beginning over 30 days after enactment, to certify each agricultural commodity in short supply, and to continue certifications thereafter; and provides that no ceiling shall be applicable to such commodities after that date unless so certified. Requires the Secretary, by Dec. 31, 1946, to recommend removal of ceilings on all agricultural commodities not important to business or living costs, and requires the Price Administrator to carry out these recommendations. If an agricultural commodity later is in short supply, permits the Secretary to provide for re-control with consent of the Price Decontrol Board. Provides that the Secretary shall not be under control of any appointive official or agency. Prohibits ceilings on agricultural commodities unless they were in existence before Apr. 1, 1946. Prohibits ceilings on poultry or eggs or their food or feed products, or tobacco or its products, except that after Aug. 20, ceilings may be reestablished with approval of the Price Decontrol Board. Prohibits ceilings on livestock, milk, or their food or feed products, cottonseed or soybeans or their food or feed products, grains under the Grain Standards Act or their feed products, prior to Aug. 21, 1946; requires the Board to hold hearings on whether these products shall be regulated and to decide the matter under certain conditions. Authorizes

the Board to decide whether subsidies shall be continued. Requires that ceilings on these commodities shall return to handlers raw-material cost, conversion of distribution cost, and a reasonable profit. Provides for petitions to the Secretary by industry committees regarding agricultural commodities, requires prompt consideration of such petitions, and permits appeals to the Board. Permits subsidies during the fiscal year 1947 for noncrop programs, 1946 crop program operations and 1947 crop program operations relating to sugar, flour, etc., \$869,000,000, with provisions for gradual reductions. Continues rent control. Provides that this bill shall not limit the Veterans' Emergency Housing Act. Includes sea food and its products as agricultural commodities. Provides that, in the case of softwood logs and lumber, ceilings shall permit producers of at least 90% of production to recover costs. Limits establishment of fabrics ceilings. Requires ceilings to return to an industry 1940 profits. Authorizes the Secretary to allocate feed to shortage areas. Permits wheat producers a choice as to the date on which prices are determined in connection with forced sales.

Majority leader McCormack announced that this measure will be considered on the floor today (p. 9824).

2. SURPLUS PROPERTY. Agreed to a resolution giving the Select Committee to Investigate the Disposition of Surplus Property, an additional \$15,000 (. 9788).
3. MINERALS. Reps. Peterson (Fla.), White, Fernandez, LeCompte, and Barrett (Wyo.) were appointed conferees on S. 1236, to promote the development of oil and gas on the public domain and on lands acquired for the Appalachian National Forest (.. 9790). Senate conferees were appointed July 19.
4. RESEARCH; ATOMIC ENERGY. Both Houses appointed conferees on S. 1717, the atomic-energy bill (pp. 9737-9, 9802).
5. HOUSING. Reps. Miller (Nebr.) and Knutson (Minn.) objected to Rep. S. once's (Ky.) request that the Banking and Currency Committee by unanimous consent be permitted to sit during the general debate while the House is in session for the remainder of the session, for the purpose of considering S. 1592, the Wagner-Blair-Taft housing bill (pp. 9822).
6. PERSONNEL; RETIREMENT. Received the conference report on H.R. 4718, to amend the Civil Service Retirement Act to provide annuities for certain employees who have rendered at least 25 years of service (p. 9822-3). The substitute bill reported by the conferees provides optional retirement at a reduced annuity for any employee who attains the age of 55 with 25 years of service if he has been involuntarily separated from the service (not by removal for cause on charges of misconduct).
7. RESEARCH. Rep. Mills, Ark., announced that he is in accord with the decision of the Interstate and Foreign Commerce Committee not to consider H.R. 6448 and S. 1850, bills to create a National Science Foundation, before the adjournment or recess of Congress (p. 9788).
8. CONGRESSIONAL REORGANIZATION. The revision of S. 2177 which Rep. McNamara plans to submit to the House (see Digest 142) includes the following amendments to the Senate revision: Changes the receipts-expenditures section so as to provide that, by Mar. 1 each year, the revenue and appropriations committees shall make an over-all estimate of receipts and expenditures, including a reserve for deficiencies, and shall report a concurrent resolution (1) to provide for reduction of the public debt if receipts are estimated to exceed expenditures or (2) to express it as the sense of Congress that the public debt be increased by the

H. R. 4947. A bill for the relief of Ethel Guenther; without amendment (Rept. No. 1793);

H. R. 5725. A bill for the relief of Sadie Frey and the estate of Marie Hviding; without amendment (Rept. No. 1800);

H. R. 6231. A bill for the relief of Frank A. Gorman; without amendment (Rept. No. 1801); and

H. R. 6536. A bill for the relief of South-eastern Sand & Gravel Co.; without amendment (Rept. No. 1802).

By Mr. BILBO, from the Committee on the District of Columbia:

S. 2408. A bill to amend the act of February 9, 1907, as amended, with respect to certain fees; without amendment (Rept. No. 1803);

H. R. 4410. A bill to amend the act entitled "An act to authorize the Commissioners of the District of Columbia to make regulations to prevent and control the spread of communicable and preventable diseases," approved August 11, 1939; without amendment (Rept. No. 1804);

H. R. 5928. A bill to name the bridge located on New Hampshire Avenue, Washington, D. C., over the Baltimore & Ohio Railroad tracks the Charles A. Langley Bridge; without amendment (Rept. No. 1805);

H. R. 5970. A bill to permit the members and stockholders of charitable, educational, and religious associations incorporated in the District of Columbia to vote by proxy or by mail; without amendment (Rept. No. 1806); and

H. R. 6859. A bill to amend section 121 of the act entitled "An act to establish a code of law for the District of Columbia," approved March 3, 1901, as amended, to authorize the appointment of three additional deputies for the register of wills; without amendment (Rept. No. 1807).

By Mr. TUNNELL, from the Committee on Pensions:

H. R. 3908. A bill to provide increased pensions to members of the Regular Army, Navy, Marine Corps, and Coast Guard who become disabled by reason of their service therein during other than a period of war; without amendment (Rept. No. 1808); and

H. R. 6900. A bill to grant increased service pensions in certain Spanish-American War cases not included in recent legislation providing increases to other Spanish-American War veterans and their dependents, and for other purposes; without amendment (Rept. No. 1809).

BILL AND JOINT RESOLUTION INTRODUCED

A bill and a joint resolution were introduced, read the first time, and, by unanimous consent, the second time, and referred as follows:

By Mr. JOHNSON of Colorado:

S. 2467. A bill to amend the National Housing Act, and for other purposes; to the Committee on Banking and Currency.

By Mr. GEORGE:

S. J. Res. 180. Joint resolution granting permission to Thomas Parran, Surgeon General of the Public Health Service; Rolla E. Dyer, Assistant Surgeon General, Public Health Service; Howard F. Smith, Assistant Surgeon General, Public Health Service; Herbert A. Spencer, medical director, Public Health Service; Vance B. Murray, medical director, Public Health Service; and Gilbert L. Dunnahoo, medical director, Public Health Service, to accept and wear certain decorations bestowed upon them by France, Cuba, Mexico, Chile, Finland, and Luang-Prabang; to the Committee on Finance.

EXTENSION OF MATURITY FOR MORTGAGES OF PROPERTY OF WORLD WAR II VETERANS UNDER NATIONAL HOUSING ACT—AMENDMENT

Mr. PEPPER submitted an amendment intended to be proposed by him to

the bill (S. 2459) to extend the maturity for mortgages under the National Housing Act in the case of property owned by veterans of World War II, which was referred to the Committee on Banking and Currency and ordered to be printed.

HOUSE BILLS REFERRED OR ORDERED TO BE PLACED ON THE CALENDAR

The following bills were severally read twice by their titles and referred or ordered to be placed on the calendar, as indicated:

H. R. 4982. An act to enable the Department of State more effectively to carry out its responsibilities in the foreign field by means of (a) public dissemination abroad of information about the United States, its people and its policies, and (b) promotion of the interchange of persons, knowledge, and skills between the people of the United States and the peoples of other countries; and

H. R. 6967. An act to improve, strengthen, and expand the Foreign Service of the United States and to consolidate and revise the laws relating to its administration; ordered to be placed on the calendar.

H. R. 6646. An act to establish the Office of Under Secretary of State for Economic Affairs; to the Committee on Foreign Relations.

PARTICIPATION BY UNITED STATES IN UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION

The PRESIDENT pro tempore laid before the Senate a message from the House of Representatives announcing its disagreement to the amendments of the Senate to the joint resolution (H. J. Res. 305) providing for membership and participation by the United States in the United Nations Educational, Scientific, and Cultural Organization, and authorizing an appropriation therefor, and requesting a conference with the Senate on the disagreeing votes of the two Houses thereon.

Mr. MURRAY. I move that the Senate insist upon its amendments, agree to the request of the House for a conference, and that the Chair appoint the conferees on the part of the Senate.

The motion was agreed to; and the President pro tempore appointed Mr. MURRAY, Mr. TUNNELL, and Mr. BRIDGES conferees on the part of the Senate.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY

The PRESIDENT pro tempore laid before the Senate the amendments of the House of Representatives to the bill (S. 1717) for the development and control of atomic energy, which were, on page 3, line 19, after the word "members" where it occurs the first time, to insert a comma and "at least one of whom shall be a member of the armed forces"; on page 5, line 23, after "annum," insert "The Director of the Division of Military Application shall be a member of the armed forces."; on page 8, after line 2, to insert:

"(d) Appointment of Army and Navy officers: Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 edition, title 10, sec. 576), section 212 of the act entitled "An act making appropriations for the Legislative Branch of the Government for the fiscal year ending June 30, 1933, and for other purposes," approved June 30, 1932, as amended (U. S. C., 1940 edition,

title 5, sec. 59a), section 2 of the act entitled "An act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June 30, 1895, and for other purposes," approved July 31, 1894, as amended (U. S. C., 1940 edition, title 5, sec. 62), or any other law, not to exceed two active or retired officers of the Army or the Navy may serve at the same time as members of the Commission, and any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to their commissioned status as such officers. Any such officer serving as a member of the Commission or as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in paragraph (2) or (4) (B), as the case may be, of subsection (a) of this section."

On page 8, line 12, to strike out "grants-in-aid."; on page 10, line 16, after "Commission", insert a comma and "as agent of and on behalf of the United States."; on page 11, line 18, after "contract", to insert "except as authorized by the Commission."; on page 12, line 17, strike out "is" and insert "and persons lawfully producing or utilizing fissionable material are"; on page 14, line 20, after "material", to insert "owned by it"; on page 16, line 21, to strike out all after "deliver" down to and including "to" in line 22, and insert a comma and "receive possession of or title to, or export from the United States"; on page 18, line 25, to strike out all after "States" over to and including "enjoy" in line 5 of page 19, and insert "subject to valid claims existing on the date of the enactment of this act"; on page 19, line 6, to strike out "person" and insert "individual"; on page 19, line 10, to strike out "person" and insert "individual"; on page 19, line 11, after "project", to insert "unless first authorized so to do by the Commission"; on page 21, to strike out lines 17 to 20, inclusive, and insert:

(1) The Commission shall not—

(A) Distribute any fissionable material to (i) any person for a use which is not under or within the jurisdiction of the United States, (ii) any foreign government, or (iii) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.

(B) License any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security.

On page 21, to strike out all after line 20, over to and including line 5 on page 22; on page 22, line 20, after "Commission", to insert "(1)"; on page 22, line 21, after "of", to insert "fissionable materials or"; on page 22, line 23, after "defense" to insert "or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon"; on page 22, lines 24 and 25, after "person" to insert a comma and "except as provided in section 6 (a)"; on page 25, line 12, to strike out "to exceed" and insert "less than"; on page

26, line 4, to strike out "States or" and insert "States,"; on page 26, lines 4 and 5, after "government" to insert a comma and "or to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security"; on page 26, line 14, after "agreement" to insert "hereafter"; on page 28, to strike out all after line 22 over to and including line 4 on page 29; on page 29, line 5, to strike out "(2)"; on page 29, strike out lines 10 to 14, inclusive; on page 29, line 15, to strike out "(c)" and insert "(b)"; on page 29, line 20, after "Commission" to insert "by unanimous vote"; on page 30, line 8, after "by" to insert "death, or by"; on page 30, line 9, after "not" to insert "less than ten years or"; on page 30, line 23, after "by" to insert "death, or by"; on page 30, line 23, after "not" where it occurs the second time to insert "less than ten years or"; on page 31, line 10, after "by" to insert "death, or by"; on page 31, line 11, after "not" to insert "less than ten years or"; on page 31, to strike out lines 12 to 15, inclusive, and insert:

(5) The Commission shall make no contract under sections 3 or 4; shall issue no license to any person nor employ any person until the Federal Bureau of Investigation shall have first made an investigation of the character and associations of such person and certified that the character of such contractor licensee or employee is such as not to endanger the common defense or security.

On page 31, line 20, to strike out "(d)" and insert "(c)"; on page 32, to strike out all after line 8 over to and including line 25 on page 38 and insert:

SEC. 11. (a) The Commission is authorized to purchase, for the manufacture or use by or for the United States Government, any and all rights in and to any invention or discovery, or application for patent or patent thereon, relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy.

(b) The Commission is authorized to condemn, and to determine and make just compensation for, any and all rights in and to any invention or discovery relating to research on or the production of fissionable materials or the utilization of fissionable materials or atomic energy that affects the national defense and security: *Provided, however*, That upon the determination by the Commission that the national defense or security is no longer involved, any and all rights in and to such invention or discovery shall revert to the owner, subject to a non-exclusive, irrevocable, and nontransferable license in favor of the Government.

(c) When any person who has made an invention or discovery relating to research on or the production of fissionable material, or the utilization of fissionable materials or atomic energy, and shall have filed an application for a patent thereon and shall have tendered his invention or discovery to the Government of the United States for its use, he shall, if and when he ultimately receives a patent, have the right to sue for compensation as provided for in subsections (d) and (e) of section 11 hereof, such right to compensation to begin from the date of any use of the invention by the Government: *Provided*, That the Commission is authorized to enter into and effect an agreement with said applicant in full settlement and compromise for the use of his invention by the Government.

(d) If any person is dissatisfied with the determination of the Commission as to just

compensation, he may have his remedy by filing a suit in the United States District Court for the District of Columbia, if filed within 6 months after such determination; and such court, on notice to the Commission and other due procedures had, may thereupon determine the amount of the compensation to be paid such person, as the facts in the case may appear: *Provided*, That in any such suit the United States may avail itself of any and all defenses, general and special, that might be pleaded by a defendant in an action for infringement, as set forth in title 60 of the Revised Statutes, or otherwise. Any final judgment rendered against the Commission under any provision of this section shall have like force and effect as a money judgment rendered against the United States by the Court of Claims in a suit in respect of which the United States has expressly agreed to be sued; and the amount of any such final judgment shall be paid out of any appropriation applicable to the case, if any such there be; and when no such appropriation exists said judgment shall be paid in the same manner as judgments rendered by the Court of Claims in cases under its general jurisdiction.

(e) Any party aggrieved by any final judgment in a proceeding under this section may appeal therefrom to the Court of Appeals of the District of Columbia, and upon such appeal said court shall have power to review said judgment and affirm, revoke, or modify the same as upon appeals in other actions at law.

(f) Attorneys appointed by the Commission may appear for and represent the Commission before any Government agency or judicial tribunal with respect to any and all invention, patent, and research matters in which the Commission is involved.

(g) Any person who has made, or hereafter makes, any invention or discovery utilizing fissionable materials or atomic energy designed or especially adapted for use as or in a military weapon, shall file with the Commission a report containing a complete description thereof. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (1) The sixtieth day after the date of enactment of this act; (2) the sixtieth day after completion of such invention or discovery; or (3) the sixtieth day after such person first discovers, or first has reason to believe that such invention or discovery is specially useful as or in such a weapon.

On page 40, line 16, to strike out all after "laws." down to and including "court." in line 19; on page 41, line 14, to strike out all after "this" down to and including all of line 20, and insert "Act; and"; on page 41, line 21, to strike out "(9)" and insert "(8)"; on page 43, after line 18 to insert:

JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

SEC. 14. (a) Notwithstanding the provisions of section 12 of the Administrative Procedure Act (Public Law 404, 79th Cong., approved June 11, 1946) which provide when such act shall take effect, section 10 of such act (relating to judicial review) shall be applicable, upon the enactment of this act, to any agency action under the authority of this act or by any agency created by or under the provisions of this act.

(b) Except as provided in subsection (a), no provision of this act shall be held to supersede or modify the provisions of the Administrative Procedure Act.

(c) As used in this section the terms "agency action" and "agency" shall have the same meaning as is assigned to such terms in the Administrative Procedure Act.

On page 43, line 20, to strike out "14" and insert "15"; on page 43, line 21, to strike out "nine" and insert "eleven"; on

page 43, line 23, to strike out "nine" and insert "eleven"; on page 44, line 1, to strike out "five" and insert "six"; on page 46, line 2, to strike out "15" and insert "16"; on page 46, line 3, to strike out "or 6 (b)" and insert "6 (b), or 11 (g)"; on page 46, line 10, after "by" where it appears the first time to insert "death or by"; on page 46, line 11, after "not" to insert "less than ten years or"; on page 46, line 15, to strike out "(c)" and insert "(b)"; on page 46, line 15, to strike out all after "(c)" down to and including "(2)" in line 16; on page 46, line 22, after "by" to insert "death, or by"; on page 46, line 23, after "not" to insert "less than ten years or"; on page 47, line 9, strike out "shall" and insert "may"; on page 47, line 9, to strike out "without bond"; on page 47, after line 18, to insert:

(e) All persons associated in any capacity, with the development and control of atomic energy, under the Commission and all violations of this act, shall be investigated by the Federal Bureau of Investigation of the Department of Justice.

On page 47, line 20, to strike out "16" and insert "17"; on page 48, line 4, to strike out "17" and insert "18"; on page 48, after line 7, insert:

(b) The term "nuclear fission" shall be construed to mean that process which takes place in nuclei wherein the nucleus is split into fragments, at least two of which contain a substantial fraction of the mass of the original nucleus.

On page 48, line 8, to strike out "(b)" and insert "(c)"; on page 48, line 15, to strike out "(c)" and insert "(d)"; on page 48, line 24, to strike out "(d)" and insert "(e)"; on page 49, line 2, after "States" to insert "and the Canal Zone"; on page 49, line 3, to strike out "(e)" and insert "(f)"; on page 49, line 10, to strike out "(f)" and insert "(g)"; on page 49, line 17, to strike out "(g)" and insert "(h)"; on page 49, line 19, after "device", to insert "peculiarly adapted for and"; on page 49, line 23, to strike out "18. (a)" and insert "19."; on page 50, to strike out lines 11 to 16, inclusive; on page 50, line 18, to strike out "19" and insert "20"; and on page 51, line 2, to strike out "20" and insert "21".

Mr. McMAHON. Mr. President, I move that the Senate disagree to the amendments of the House; ask a conference with the House on the disagreeing votes of the two Houses thereon, and that the Chair appoint the conferees on the part of the Senate.

The motion was agreed to; and the President pro tempore appointed Mr. McMAHON, Mr. JOHNSON of Colorado, Mr. RUSSELL, Mr. VANDENBERG, and Mr. AUSTIN conferees on the part of the Senate at the conference.

Mr. McMAHON subsequently said: Mr. President, earlier in the day the Chair appointed the Senator from Vermont [Mr. AUSTIN] as one of the conferees on Senate bill 1717. I am informed that the Senator from Vermont [Mr. AUSTIN] will find it impossible to be present tomorrow and Wednesday. In view of the exigencies of the situation and the necessity for speedy action, I desire to obtain unanimous consent to have the Senator from Colorado [Mr. MILLIKIN] appointed

as one of the conferees, in place of the Senator from Vermont.

The PRESIDENT pro tempore. Is there objection to the unanimous-consent request of the Senator from Connecticut to have the Senator from Colorado [Mr. MILLIKIN] substituted for the Senator from Vermont [Mr. AUSTIN] as one of the conferees on the part of the Senate in regard to the measure pertaining to the control of atomic energy? The Chair hears none, and, without objection, it is so ordered.

Mr. McMAHON. Mr. President, I also ask unanimous consent to have the bill printed showing the House amendments numbered.

The PRESIDENT pro tempore. Without objection, it is so ordered.

DEATH OF WILLIAM STANLEY, FORMER ASSISTANT TO THE ATTORNEY GENERAL OF THE UNITED STATES

Mr. McMAHON. Mr. President, on Saturday last William Stanley, a beloved son of Maryland, was called to final rest. Bill Stanley, as he was affectionately known, had the priceless gift of friendship. His splendid family is today joined by hundreds of people, high and low, in mourning his passing.

I first met Bill Stanley when I went to work for the Department of Justice in 1933. I became his assistant. His was the strong right arm of a great Attorney General, Homer Cummings, in the reorganization of the Department of Justice during the exciting years 1933-1935. The Department at that time was suddenly called upon to meet the changed conditions of the times, and no one gave more valiant and valuable service to his immediate superior, the Attorney General, and to the President, in that work than Mr. Stanley in the post of the Assistant to the Attorney General.

Mr. President, we are now inclined to forget that prior to 1933 the Federal Bureau of Investigation was a comparatively small and unknown division of the Department of Justice. Its agents did not have the power of arrest nor the right to bear arms, and until the Congress defined, at the request of Mr. Cummings, an entirely new area of Federal jurisdiction over criminals who plied their trade across State lines, the Nation was sorely beset with gangs of kidnapers, bank robbers, and bandits who roamed the country, looting and murdering it seemed almost at will. These were the days of the Dillingers and the Van Meters, of the Baby Face Nelsons and the Pretty Boy Floyds, and dozens of others of like ilk.

The Federal Bureau of Investigation, under the efficient and intelligent direction of its leader, Mr. J. Edgar Hoover, brought these criminals to book after the Attorney General had so brilliantly marked and laid out the course and after Bill Stanley had acted as the liaison officer with the Congress in securing the necessary legislative authority. This great unit of the Department of Justice, as did all other units of the Department of Justice, functioned, under the skilled supervision of Mr. Stanley, and the results so splendidly achieved will forever stand as a monument to his memory.

The Assistant to the Attorney General fills a most responsible post. His is the post of general superintendent of the Department of Justice, answerable only to the Attorney General. His is the responsibility for maintaining liaison with the Congress. It was because of this part of his duties that he came into such close and intimate contact with so many Members of this body who learned to respect his ability, fairness, and integrity.

His friendly nature and capacity for service to his country won him the affection of scores of the Members of the Senate.

In 1935 he resigned from the Department of Justice to resume the practice of his profession here in Washington. His fine talents inevitably drew a large clientele. After his beloved chief retired in 1939 as Attorney General it was entirely appropriate and natural that they should form a partnership, which they did under the name of Cummings & Stanley. Their firm has become one of the leading law firms of the country.

And now in the prime of his life, Bill Stanley has left us. His wife and children and his partners and associates will be joined by his ex-fellow workers in the Department of Justice and his hundreds of friends, leaders in the Nation's business and political life, in grief because of his untimely death.

His was a life illuminated by kindness to his fellow men and service to his country.

May his soul rest in peace.

Mr. RADCLIFFE. Mr. President, I have listened with a feeling of deep appreciation to the eloquent tribute paid by the Senator from Connecticut [Mr. McMAHON] to a very distinguished Marylander, Mr. William Stanley, whose friendship I enjoyed throughout his life. Mr. Stanley's years were all too few in number, but they were busy, useful ones. He succeeded in accomplishing in a brilliant manner many things which were most assuredly worth while. The commanding Nation-wide position which he held at the bar and in the confidence and affections of people of our country was in natural recognition of his integrity, his ability, and of the important and highly constructive role which he played in the State of Maryland and in the Nation. His loss is indeed a very serious one.

GENERAL EISENHOWER'S REVIEW OF ACTION OF SUPREME HEADQUARTERS SUSPENDING PRESS CREDENTIAL OF EDWARD KENNEDY

Mr. DOWNEY. Mr. President, I should like to make a matter of record the latest developments in a case which has been a subject of great interest to the public and especially to the newspaper world. I refer to an Associated Press dispatch sent from France by Edward Kennedy on May 7, 1945, which gave the American people the news of the unconditional surrender of Germany.

I requested General Eisenhower to review the action of Supreme Headquarters in suspending the press credential of Mr. Kennedy, which was done on the grounds that he dispatched this news before its sending was authorized. Gen-

eral Eisenhower agreed to do so and I am now happy to have the opportunity to announce that he has removed any bar which might prevent Mr. Kennedy from working with the War Department and the Army in his profession as a writer.

General Eisenhower's action, as I understand it, does not rescind the decision of Supreme Headquarters in the case, which the War Department still believes was justified, but, nevertheless, restores to Mr. Kennedy the opportunity of resuming, without prejudice, his work as a military correspondent should he desire to do so in the future. General Eisenhower also has told me that he wishes Mr. Kennedy every success.

To further clarify the case, I would like to submit for the RECORD several documents, some of which have not been previously made public. These are:

First. The text of the official German announcement of the unconditional surrender, broadcast publicly by the Doenitz government over the radio at Flensburg, Denmark, as monitored and distributed for immediate publication by the British Ministry of Information.

Second. A War Department memorandum in which Lt. Gen. Walter Bedell Smith, who was chief of staff at Supreme Headquarters at the time of the surrender, states that the Flensburg announcement was "made pursuant to orders from Supreme Headquarters that the German troops were to be informed by every possible means of the surrender and directed to cease resistance."

Third. A letter from the War Department's Bureau of Public Relations to Representative ALBERT GORE establishing the fact that the Flensburg announcement was made 1 hour and 54 minutes before the Kennedy story of the surrender appeared on the news wire.

Fourth. A statement by Relman Morin, a member of Kennedy's staff in Paris, that he was present at a conference at which Kennedy informed the chief American censor at Supreme Headquarters that since the surrender had already been made public by the Germans, he considered the story released and intended to send his dispatch.

Mr. President, I ask unanimous consent that there may be printed in the RECORD, following my statement, the documents to which I have referred.

There being no objection, the documents were ordered to be printed in the RECORD, as follows:

TEXT OF VON KROSIGK STATEMENT; PLEDGES RESPECT FOR TREATIES

LONDON, May 7.—Following is the text of the broadcast of the German Foreign Minister Ludwig Schwerin von Krosigk as recorded by the British Ministry of Information:

"German men and women: The high command of the armed forces has today at the order of Grand Admiral Doenitz declared the unconditional surrender of all fighting German troops.

"As the leading minister of the Reich Government which the Admiral of the Fleet (Doenitz) has appointed for the winding up of all military tasks, I turn at this tragic moment of our history to the German Nation.

"GERMANY HAS SUCCUMBED

"After a heroic fight of almost 6 years of incomparable hardness Germany has succumbed to the overwhelming power of her enemies. To continue the war would only mean senseless bloodshed and a futile disintegration.

"A government which has a feeling of responsibility for the future of its nation was compelled to act on the collapse of all physical and material forces and to demand of the enemy the cessation of hostilities.

"It was the noblest task of admiral of the fleet and of the government supporting him—after the terrible sacrifices which the war demanded—to save in the last phase of the war the lives of a maximum number of fellow countrymen. That the war was not ended immediately, simultaneously in the west and in the east, is to be explained by this reason alone.

"We end this gravest hour of the German Nation and its Reich.

"GERMANS MUST FACE FATE

"In this gravest hour of the German Nation and its Reich we bow in deep reverence before the dead of this war. Their sacrifices place the highest obligations on us. Our sympathy goes first to our soldiers. It goes out above all to the wounded, the bereaved, and to all on whom this struggle has inflicted blows.

"No one must be under any illusions about the severity of the terms to be imposed on the German people by our enemies. We must now face our fate squarely and unquestionably. Nobody can be in any doubt that the future will be difficult for each one of us and will exact sacrifices from us in every sphere.

"We must accept this burden and stand loyally by the obligations we have undertaken. But we must not despair and fall into mute resignation. Once again we must set ourselves to stride along the path through the dark future. These are the factors guaranteeing the best state: unity, justice, and liberty.

"URGES RECOGNITION OF LAW

"From the collapse of the past let us preserve and save one thing—unity, the ideas of the national community, which in the years of war have found their highest expression in the spirit of comradeship at the front and readiness to help one another in all the distress which has inflicted the homeland.

"Shall we retain this unity and not again split up under the stress? We must make right the basis of our nation. In our nation justice shall be the supreme law and the guiding principle.

"We must also recognize law as the basis of all relations between the nations: we must recognize it and respect it from inner conviction.

"TREATIES TO BE SACRED

"Respect for concluded treaties will be as sacred as the aim of our nation to belong to the European family of nations as a member of which we want to mobilize all human, moral, and material forces in order to heal the dreadful wounds which the war has caused.

"Then we may hope that the atmosphere of hatred which today surrounds Germany all over the world will give place to a spirit of reconciliation among the nations, without which the world cannot recover.

"Then we hope that we will again receive the freedom without which no nation can lead a bearable and dignified existence. Let us devote the future of our nation to the meditation of the innermost and best forces of the German spirit, which has given the world lasting achievements and values.

"To our pride in the heroic struggle of our nation let us link (several words missing) of the Christian western civilization to make to the honest work of peace a contribution which shall be worthy of the best traditions of our nation.

"May God not leave us in our efforts. May He bless our difficult task."

At the conclusion the announcer said: "We will now observe 3 minutes of silence."

The following memorandum was dictated by Lt. Gen. Walter Bedell Smith just before his departure for Moscow in reply to several questions asked by an editor interested in the case.

WAR DEPARTMENT,

WAR DEPARTMENT GENERAL STAFF,
Washington, D. C., March 14, 1946.

Memorandum for Lieutenant Colonel Root.
Subject: German broadcast of surrender.

1. Ludwig Schwerin von Krosigk did officially announce the unconditional surrender of Germany in a broadcast to the German people and to the world from Flensburg. I believe that this announcement was made on May 7. The so-called Doenitz government had not at this time been taken into custody and this announcement was made pursuant to orders from Supreme Headquarters that the German troops were to be informed by every possible means of the surrender and directed to cease resistance, which amounted to a great deal more than "isolated German pockets." At least two German armies were continuing strongly to resist the Russians at the time, and one army commander had indicated that he would not accept the order for surrender. We were surprised at the Krosigk broadcast since we had expected that any such announcement would be made either by a military commander such as Keitel or by Doenitz.

2. I do not know what Mr. McCreary means by disciplinary action. We were much too concerned with disarming and taking into custody as prisoners of war a couple of million German soldiers to pay much attention to individuals. We simply arrested the entire Doenitz Government at the first suitable opportunity.

W. B. S.

WAR DEPARTMENT,

BUREAU OF PUBLIC RELATIONS,
Washington, March 15, 1946.

HON. ALBERT GORE,
United States House of Representatives.

DEAR MR. GORE: In the absence of General Parks, who is at present on a trip overseas, I am replying to your letter relative to the Flensburg surrender broadcast.

Our records reveal the following information:

Count von Krosigk broadcast the surrender announcement from Flensburg, Denmark, on May 7, 1945, at 8:03 a. m. eastern war time. The AP dispatch appeared on the wire on May 7, 1945, at 9:57 a. m. eastern war time.

I have been unable to find any indication that allied military authorities authorized the broadcast. Although it is the impression here that the broadcast was made without the consent of the Allies, I have queried the theater for further information on this point. It may be quite difficult, if not impossible, to obtain accurate information from German military authorities.

If I obtain any additional information from the theater, I shall forward it to you immediately.

Sincerely yours,

JOSEPH F. BATTLE,
Brigadier General, G. S. C., Acting
Director.

STATEMENT OF RELMAN MORIN, A MEMBER OF THE
PARIS STAFF OF THE ASSOCIATED PRESS, TO
EDWARD KENNEDY

The first indication that we had that the story might break came at noon on Monday when you returned from Rheims. A French correspondent told me he had heard that de Gaulle was going to make an important speech at 3 o'clock, that the speech was al-

ready being written, and that it was generally understood it was about the armistice.

It was about 2:30 or 2:45 when you and I returned to the office together. Gudebrod was on the telephone as we came in. He said: "The office (meaning the office in the Incoming Service) has just had a flash from the Flensburg radio about the armistice." He was then getting the transcript of the message. He said: "The German Government has broadcast the fact of the armistice to all its armed forces everywhere, telling them to cease operations and ordering submarines and shipping to the nearest allied ports to surrender."

It was then that you attempted to telephone General Allen at his office and to reach Colonel Warden in his office. Both attempts were unsuccessful.

You then went downstairs to the office of Lt. Col. R. H. Merrick, American chief censor. I stayed in the office until Gudebrod had finished writing down the text of the Flensburg broadcast. I then came downstairs and found you talking to Merrick in his office. I handed Merrick the written text of the German broadcast.

He read it and as I remember his reply, he said: "I can't help it, who is announcing the armistice and when. The Shaef release date still stands. There is nothing I can do about it." You replied: "But how can there be any longer question of military security, since the Germans themselves have announced it?" He said: "That may or may not be true, but there is nothing we can do about it."

You then said: "All right, but I give you warning now I am going to release the story, I see no further reason for Shaef to withhold it."

I don't remember exactly Merrick's reply, but it was something to the effect: "You do as you please."

Merrick later told me that he believed you had already transmitted all or part of the story before you ever came down there, and I assured him that that was not so, that it was only after hearing the Flensburg broadcast and after trying to get in touch with General Allen and Colonel Warden that you had come down to see him, not a word had gone before that time.

We then came upstairs again and you began telephoning.

RELMAN MORIN.

SIDNEY HILLMAN—ARTICLE FROM THE ADVANCE

[Mr. MEAD asked and obtained leave to have printed in the RECORD an article entitled "Labor Statesman," printed in the July 15, 1946, edition of the publication the Advance, which appears in the Appendix.]

THE PEARL HARBOR REPORT—EDITORIAL COMMENT

[Mr. LUCAS asked and obtained leave to have printed in the RECORD the following editorials commenting on the Pearl Harbor report: An editorial entitled "The Last Word," published in the New York Herald Tribune of July 22, 1946; an editorial entitled "Pearl Harbor Findings," published in the Washington Evening Star of July 21, 1946; an editorial entitled "The Congressional Finding on the Pearl-Harbor Disaster," published in the Baltimore Sun of July 22, 1946; and an editorial entitled "The Pearl Harbor Report," published in the New York Times of July 21, 1946, which appear in the Appendix.]

FINANCIAL OPERATIONS OF THE WAR SHIPPING ADMINISTRATION—EDITO- RIAL FROM ST. LOUIS POST-DISPATCH

[Mr. AIKEN asked and obtained leave to have printed in the RECORD an editorial entitled "WSA's Floundering Figures," published in the St. Louis Post-Dispatch of July 19, 1946, which appears in the Appendix.]

The SPEAKER. Evidently a quorum is not present.

The Doorkeeper will close the doors, the Sergeant at Arms will notify absent Members, and the Clerk will call the roll.

The question was taken; and there were—yeas 114, nays 153, not voting 163, as follows:

[Roll No. 230]

YEAS—114

Abernethy	Gamble	Pickett
Allen, Ill.	Gavin	Pittenger
Allen, La.	Gibson	Plumley
Andersen,	Gifford	Poage
H. Carl	Goodwin	Price, Fla.
Andresen,	Gwynne, Iowa.	Rankin
August H.	Hall	Reed, N. Y.
Arnold	Edwin Arthur	Rees, Kans.
Barden	Hancock	Rich
Barrett, Wyo.	Harris	Riley
Bell	Henry	Robertson,
Bennett, Mo.	Hess	N. Dak.
Bolton	Hobbs	Robison, Ky.
Brehm	Hoeven	Rodgers, Pa.
Brown, Ohio	Holmes, Mass.	Roe, Md.
Buck	Hope	Schwabe, Mo.
Buffett	Horan	Schwabe, Okla.
Butler	Jenkins	Scrivner
Cannon, Mo.	Jennings	Sharp
Carlson	Jensen	Smith, Ohio
Case, S. Dak.	Johnson, Ill.	Smith, Wis.
Chapfield	Jones	Stevenson
Church	Jonkman	Taber
Clason	Kearney	Talle
Cole, Mo.	Knutson	Tarver
Colmer	Lanham	Taylor
Crosser	Latham	Tibbott
Cunningham	Lea	Towe
Curtis	LeCompte	Wadsworth
Dolliver	Lewis	Wasielewski
Dondero	McGregor	Weichel
Doughton, N. C.	Martin, Iowa	Whitten
Dworshak	Mason	Whittington
Elliott	Miller, Nebr.	Winstead
Ellis	Mills	Winter
Ellsworth	Murray, Tenn.	Wolcott
Elsaesser	Murray, Wis.	Woodruff
Elston	Norblad	Zimmerman
Fellows	Norrell	
Fisher	Phillips	

NAYS—153

Andrews, Ala.	Grant, Ala.	O'Brien, Ill.
Angell	Grant, Ind.	O'Brien, Mich.
Arends	Gregory	O'Hara
Auchincloss	Griffiths	O'Neal
Bailey	Gross	Outland
Bates, Mass.	Hagen	Pace
Elshop	Harness, Ind.	Patman
Blackney	Havener	Patterson
Bland	Hays	Peterson, Fla.
Bloom	Healy	Pratt
Bonner	Hedrick	Price, Ill.
Brooks	Hertel	Rabaut
Brown, Ga.	Heseltan	Rains
Buchanan	Hinshaw	Ramey
Byrne, N. Y.	Howell	Reed, Ill.
Byrnes, Wis.	Huber	Resa
Camp	Hull	Richards
Carnahan	Jarman	Riley
Case, N. J.	Johnson, Calif.	Robertson, Va.
Chapman	Johnson, Ind.	Rogers, Fla.
Chelf	Judd	Rogers, Mass.
Clements	Kee	Rogers, N. Y.
D'Alesandro	Keefe	Rowan
Davis	Kelley, Pa.	Ryder
D'Ewart	Kelly, Ill.	Sadowski
Dirksen	King	Sagecer
Domengeaux	Kinzer	Savage
Douglas, Calif.	Kirwan	Shafer
Douglas, Ill.	Kopplemann	Sheppard
Eberhart	Kunkel	Sikes
Engle, Calif.	Landis	Simpson, Ill.
Ervin	Lane	Smith, Maine
Fallon	Larcade	Smith, Va.
Feighan	LeFevre	Spence
Fenton	Lemke	Springer
Fernandez	Lesinski	Starkey
Flannagan	Link	Stefan
Fogarty	Lyle	Sullivan
Foiger	McConnell	Sumners, Tex.
Forand	McCormack	Thom
Fulton	McCowan	Thomas, Tex.
Gardner	McDonough	Thomason
Gathings	Madden	Trimble
Gearhart	Manasco	Voorhis, Calif.
Geelan	Martin, Mass.	Vorys, Ohio
Gillette	Mathews	Vursell
Gillie	May	Walter
Gore	Michener	Weaver
Gorski	Monroney	Wilson
Graham	Murdock	Wolverton, N. J.
Granger	Neely	Woodhouse

NOT VOTING—163

Adams	Engel, Mich.	Marcantonio
Almond	Flood	Morrow
Anderson, Calif.	Fuller	Miller, Calif.
Andrews, N. Y.	Gallagher	Morgan
Baldwin, Md.	Gary	Morrison
Baldwin, N. Y.	Gerlach	Mundt
Barrett, Pa.	Gillespie	Norton
Barry	Gordon	O'Konski
Bates, Ky.	Gossett	O'Toole
Beall	Granahan	Patrick
Beckworth	Green	Peterson, Ga.
Bender	Gwinn, N. Y.	Pfelfer
Bennet, N. Y.	Hale	Philbin
Biemiller	Hall	Ploeser
Boren	Leonard W.	Powell
Boykin	Halleck	Priest
Bradley, Mich.	Hand	Quinn, N. Y.
Bradley, Pa.	Hare	Rabin
Brumbaugh	Harless, Ariz.	Randolph
Bryson	Hart	Rayfield
Buckley	Hartley	Reece, Tenn.
Bulwinkle	Hébert	Rivers
Bunker	Heffernan	Robinson, Utah
Campbell	Hendricks	Rockwell
Canfield	Hill	Roe, N. Y.
Cannon, Fla.	Hoch	Rooney
Celler	Hoffman, Mich.	Russell
Chenoweth	Hoffman, Pa.	Sabath
Clark	Hollfield	Sheridan
Clevenger	Holmes, Wash.	Short
Clippinger	Hook	Simpson, Pa.
Cochran	Izac	Slaughter
Coffee	Jackson	Somers, N. Y.
Cole, Kans.	Johnson, Okla.	Sparkman
Cole, N. Y.	Johnson, Tex.	Stewart
Combs	Kean	Stigler
Cooley	Kefauver	Stockman
Cooper	Keogh	Sumner, Ill.
Corbett	Kerr	Sundstrom
Courtney	Kilburn	Talbot
Cox	Kilday	Thomas, N. J.
Cravens	Klein	Tolan
Crawford	LaFollette	Torrens
Curley	Luce	Traynor
Daughton, Va.	Ludlow	Vinson
Dawson	Lynch	Welch
De Lacy	McGehee	West
Delaney,	McGlinchey	White
James J.	McKenzie	Wickersham
Delaney,	McMillan, S. C.	Wigglesworth
John J.	McMillen, Ill.	Wolfenden, Pa.
Dingell	Mahon	Wood
Doyle	Maloney	Worley
Drewry	Mankin	
Durham	Mansfield,	
Earthman	Mont.	
Eaton	Mansfield, Tex.	

So the amendment was rejected.

The Clerk announced the following pairs:

General pairs until further notice:

Mr. Hart with Mr. Short.
Mr. Sparkman with Mr. Simpson of Pennsylvania.
Mr. Dingell with Mr. Ploeser.
Mr. Vinson with Mr. Talbot.
Mr. Keogh with Mr. Stockman.
Mr. Izac with Mr. Thomas of New Jersey.
Mr. Boykin with Mr. Holmes of Washington.
Mr. Sheridan with Mr. Fuller.
Mrs. Norton with Mr. Hoffman of Michigan.
Mr. Roe of New York with Mr. Eaton.
Mr. Barrett of Pennsylvania with Mr. Hill.
Mr. Mansfield of Montana with Mr. Cole of Kansas.
Mr. Wood with Mr. Hartley.
Mr. Pfeiffer with Mr. Clevenger.
Mr. Lynch with Mr. Brumbaugh.
Mr. McGlinchey with Mr. Adams.
Mr. Rooney with Mr. Bradley of Michigan.
Mr. Priest with Mr. Anderson of California.
Mr. Celler with Mr. Bender.
Mr. Almond with Mr. Halleck.
Mr. Powell with Mr. Gillespie.
Mr. Granahan with Mr. Engel of Michigan.
Mr. John J. Delaney with Mr. Mundt.
Mr. Heffernan with Mr. Kilburn.
Mr. Kefauver with Mr. Canfield.
Mr. Bradley of Pennsylvania with Mr. Reece of Tennessee.
Mr. Green with Mr. Leonard W. Hall.
Mr. Quinn of New York with Mr. Clippinger.
Mr. Wickersham with Mr. Bennet of New York.
Mr. O'Toole with Mr. Corbett.
Mr. Flood with Mr. Merrow.

Mr. Rabin with Mr. Cole of New York.
 Mr. Hébert with Mr. McMillen of Illinois.
 Mr. Barry with Mr. Chenoweth.
 Mr. Morrison with Mr. Rockwell.
 Mr. Somers of New York with Mr. Crawford.
 Mr. Doyle with Mr. Wigglesworth.
 Mr. Randolph with Mr. Gerlach.
 Mr. Hook with Mr. Welch.
 Mr. Buckley with Mr. Gwinn of New York.
 Mr. Patrick with Mr. Campbell.
 Mr. Johnson of Texas with Mr. Wolfenden of Pennsylvania.
 Mr. Klein with Mr. Hand.
 Mr. James J. Delaney with Miss Sumner of Illinois.

Mr. Cooper with Mrs. Luce.
 Mr. Jackson with Mr. Hale.
 Mr. De Lacy with Mr. Kean.
 Mr. Gordon with Mr. Hoffman of Pennsylvania.

Mr. Miller of California with Mr. O'Konski.

Mr. BLAND, Mr. THOM, and Mr. GEARHART changed their votes from "yea" to "nay."

The result of the vote was announced as above recorded.

The SPEAKER. The question is on the third reading of the bill.

The bill was ordered to be read a third time, and was read the third time.

The SPEAKER. The question is on the passage of the bill.

The question was taken; and on a division (demanded by Mr. SMITH of Ohio) there were—ayes 115, noes 9.

So the bill was passed.

A motion to reconsider was laid on the table.

BILLIONS FOR BRITAIN—NONE FOR AMPUTEES

Mr. HOFFMAN of Michigan. Mr. Speaker, Tuesday there came to the Capitol a group of fine-looking, intelligent young Americans, every one mentally alert, in fine physical condition except that everyone of them had in the service of his country lost a limb or a part of a limb. And what were they here for?

They were here asking that the Federal Government, which has spent hundreds of billions of dollars upon schemes conceived by the fuzzy-brained New Dealers, aid them in procuring especially equipped vehicles which would enable them to get to and from their homes and the jobs which they either had secured or had prospects of securing, thus rendering the task of supporting themselves and their dependents more certain.

It is strange indeed that it should be necessary for any group of young Americans who had sacrificed so much to come to Washington on a mission so meritorious. There has been no organized newspaper propaganda spent to further the legislation for which they were asking. The internationalists and one worlders do not seem interested.

Britain, prior to and during the last war, spent some \$12,000,000 convincing Americans they should fight that war and, after it was over, give her other billions in order to establish world trade from which she was the principal beneficiary.

No one knows how many millions or billions were spent prior to, during, and subsequent to this war to extract other billions of dollars from the American taxpayer and divert it into channels which we are told promote foreign trade.

"Foreign trade" are wonderful words and, so far as the average citizen can see, foreign trade means dollars and millions of dollars for a few engaged in commercial enterprise. It means more postwar millionaires.

There is naturally and rightly a great deal of sympathy for these young men who are suffering handicaps because of sacrifices made in the service of our country and it is more than passing strange that those who were so intent upon propagandizing us into the war failed prior to the war to count the cost, if the cost of such a war can be counted, and to make provision for the Americans who were certain to be ruined by it, or whose chances of success have been lessened by the sacrifices they made to win it.

Billions for Britain; billions for Russia; billions for France and China—for every nation and every cause that may be suggested by the internationalists—but a strange lassitude and inaction when it comes to taking care of Americans here at home who were so fortunate as to return; who were so unfortunate as to have left behind in foreign lands a limb or a part of a limb, the loss of which prevents them from competing with the rest of us upon an equal footing.

It is my hope that the internationalists and the "one world" advocates who always remind us we are dependent upon Britain; who are always telling us that England is our first line of defense; who always insist that without England we as a nation would be wiped out, turn their attention, now that the real fighting is over, just for a moment from their international schemes and do justice to these young men whose representatives appeared here yesterday, and to the other young men and women who served us so faithfully, so courageously, and at such tremendous sacrifice in the war which saved the British Empire from destruction.

War was the goal of the internationalists. They have had it. Now let them come forth and assist in passing legislation which will, in part at least but in very small part, meet the needs of those who assisted in winning that war.

I was one of those who had faith in America and in her ability to defend herself and her institutions from any enemy, from any combination of enemies. I am one of those who today believe that the interests of America and her people should be given first consideration and, had I my way, I would have our counting first, take care of every unfortunate, needy American before alining ourselves with their group which in the Old World is playing power politics; establishing once more a balance-of-power alinement.

The gift of approximately \$4,000,000,000 to Great Britain means either that we take our place by her side as her ally, join her in every quarrel and every war in which she may become involved or that, if we intend to hold ourselves out as fair and impartial, we give proportionate sums to Russia, France, China—to every other country which may be persuaded to ask us for aid. Either course means a surrender of a part of our sovereignty, a loss of our

freedom; of national independence and action; a partnership and military alliance with the British Empire; committed to follow her in all her imperialistic policies or if she so decides, give support to her socialistic schemes.

Why not retain our own form of government; our own independence in international affairs; keep ourselves invincible; maintain ourselves in a position where as the most powerful Nation we can determine the course of world events by our ability to decide world issues which concern us by calling the attention of would-be aggressor nations to our power.

Here at home let us first take care of our own and, when caring for our own, let us first give consideration to those young men and young women who have returned either with mind affected or physically handicapped.

FURTHER MESSAGE FROM THE SENATE

A further message from the Senate by Mr. Koerber, its assistant enrolling clerk, announced that the Senate insists upon its amendments to the joint resolution (H. J. Res. 305) entitled "Joint resolution providing for membership and participation by the United States in the United Nations Educational, Scientific, and Cultural Organization, and authorizing an appropriation therefor," disagreed to by the House; agrees to the conference asked by the House on the disagreeing votes of the two Houses thereon, and appoints Mr. MURRAY, Mr. TUNNELL, and Mr. BRIDGES to be the conferees on the part of the Senate.

The message also announced that the Senate disagrees to the amendments of the House to the bill (S. 1717) entitled "An act for the development and control of atomic energy," requests a conference with the House on the disagreeing votes of the two Houses thereon, and appoints Mr. McMAHON, Mr. JOHNSON of Colorado, Mr. RUSSELL, Mr. VANDENBERG, and Mr. AUSTIN to be the conferees on the part of the Senate.

ATOMIC ENERGY ACT OF 1946

Mr. MAY. Mr. Speaker, I ask unanimous consent to take from the Speaker's table the bill (S. 1717) for the development and control of atomic energy, with House amendments thereto, insist on the House amendments, and agree to the conference asked by the Senate.

The Clerk read the title of the bill.

The SPEAKER. Is there objection to the request of the gentleman from Kentucky? [After a pause.] The Chair hears none and appoints the following conferees: Messrs. MAY, THOMASON, BROOKS, CLASON, and THOMAS of New Jersey.

PUBLIC SCHOOLS OF THE DISTRICT OF COLUMBIA

Mr. HEALY. Mr. Speaker, by direction of the Committee on the District of Columbia, I call up the bill (S. 2142) to provide for two heads of departments of military science and tactics in the public schools of the District of Columbia, and ask unanimous consent that the bill be considered in the House as in the Committee of the Whole.

The Clerk read the title of the bill.

The SPEAKER. Is there objection to the request of the gentleman from California?

There was no objection.

The Clerk read the bill, as follows:

Be it enacted, etc., That the Board of Education is hereby authorized to establish in the public schools of the District of Columbia two positions, each with a title "head of department of military science and tactics." Persons shall be appointed or promoted to such positions in accordance with the provisions of the District of Columbia Teachers' Salary Act of 1945, as amended, and shall be entitled to receive salaries at the same rate as heads of departments assigned to salary class 17 of the salary schedules set forth in title I of said act.

SEC. 2. That the act entitled "An act to provide for the payment of a military instructor for the high-school cadets of Washington, District of Columbia," approved June 4, 1935, is hereby repealed.

Mr. HEALY. Mr. Speaker, at the present time instruction in the high schools of the District of Columbia in military science is being given by teachers in the high school system. In the colored schools as well as in the white schools one teacher is acting as head of the department of military science and receiving no additional pay therefor. This bill provides for the establishment of a department of military science and tactics in the high schools and creates two positions, each with the title of head of that department. This would mean that the teacher, who is given the responsibility for formulating and directing the program, would receive compensation comparable to that received by heads of other departments in the school system.

The bill meets with the approval of the local board of education as well as the District Commissioners. The Committee on the District of Columbia unanimously recommends its adoption.

Mr. O'HARA. Mr. Speaker, will the gentleman yield?

Mr. HEALY. I yield.

Mr. O'HARA. Is there anything compulsory about the military training?

Mr. HEALY. This does not change the features of the military-training program in the high schools. It merely provides for the creation of a Department of Military Science and two department heads.

Mr. O'HARA. Is the military training optional with the students?

Mr. HEALY. That is left the way it is now. I am not acquainted with whether it is optional or compulsory.

The bill was ordered to be read a third time, was read the third time, and passed, and a motion to reconsider was laid on the table.

INCREASING SALARIES OF EMPLOYEES OF BOARD OF EDUCATION

Mr. HEALY. Mr. Speaker, I call up the bill (S. 2352) to authorize increases in the salary rates of teachers, school officers, and other employees of the Board of Education of the District of Columbia whose pay is fixed and regulated by the District of Columbia Teachers' Salary Act of 1945, as amended, and ask unanimous consent that the bill be considered in the House as in Committee of the Whole.

The Clerk read the title of the bill.

79TH CONGRESS
2D SESSION

S. 1717

IN THE SENATE OF THE UNITED STATES

JULY 22 (legislative day, JULY 5), 1946

Ordered to be printed with the amendments of the House of Representatives
numbered

AN ACT

For the development and control of atomic energy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 DECLARATION OF POLICY

4 SECTION 1. (a) FINDINGS AND DECLARATION.—Re-
5 search and experimentation in the field of nuclear chain
6 reaction have attained the stage at which the release of
7 atomic energy on a large scale is practical. The sig-
8 nificance of the atomic bomb for military purposes is evident.
9 The effect of the use of atomic energy for civilian purposes
10 upon the social, economic, and political structures of today
11 cannot now be determined. It is a field in which unknown

1 factors are involved. Therefore, any legislation will neces-
2 sarily be subject to revision from time to time. It is rea-
3 sonable to anticipate, however, that tapping this new source
4 of energy will cause profound changes in our present way
5 of life. Accordingly, it is hereby declared to be the policy
6 of the people of the United States that, subject at all
7 times to the paramount objective of assuring the common
8 defense and security, the development and utilization of
9 atomic energy shall, so far as practicable, be directed to-
10 ward improving the public welfare, increasing the standard
11 of living, strengthening free competition in private enter-
12 prise, and promoting world peace.

13 (b) PURPOSE OF ACT.—It is the purpose of this Act to
14 effectuate the policies set out in section 1 (a) by providing,
15 among others, for the following major programs relating to
16 atomic energy:

17 (1) A program of assisting and fostering private re-
18 search and development to encourage maximum scientific
19 progress;

20 (2) A program for the control of scientific and technical
21 information which will permit the dissemination of such in-
22 formation to encourage scientific progress, and for the sharing
23 on a reciprocal basis of information concerning the practical
24 industrial application of atomic energy as soon as effective

1 and enforceable safeguards against its use for destructive
2 purposes can be devised;

3 (3) A program of federally conducted research and
4 development to assure the Government of adequate scientific
5 and technical accomplishment;

6 (4) A program for Government control of the produc-
7 tion, ownership, and use of fissionable material to assure
8 the common defense and security and to insure the broadest
9 possible exploitation of the field; and

10 (5) A program of administration which will be con-
11 sistent with the foregoing policies and with international
12 arrangements made by the United States, and which will
13 enable the Congress to be currently informed so as to take
14 further legislative action as may hereafter be appropriate.

15 ORGANIZATION

16 SEC. 2. (a) ATOMIC ENERGY COMMISSION.—

17 (1) There is hereby established an Atomic Energy
18 Commission (herein called the Commission), which shall be
19 composed of five members **(1)**, *at least one of whom shall be a*
20 *representative of the armed forces.* Three members shall con-
21 stitute a quorum of the Commission. The President shall
22 designate one member as Chairman of the Commission.

23 (2) Members of the Commission shall be appointed by
24 the President, by and with the advice and consent of the
25 Senate. In submitting any nomination to the Senate, the

1 President shall set forth the experience and the qualifications
2 of the nominee. The term of office of each member of the
3 Commission taking office prior to the expiration of two years
4 after the date of enactment of this Act shall expire upon the
5 expiration of such two years. The term of office of each
6 member of the Commission taking office after the expiration
7 of two years from the date of enactment of this Act shall be
8 five years, except that (A) the terms of office of the mem-
9 bers first taking office after the expiration of two years from
10 the date of enactment of this Act shall expire, as designated
11 by the President at the time of appointment, one at the end
12 of three years, one at the end of four years, one at the end
13 of five years, one at the end of six years, and one at the
14 end of seven years, after the date of enactment of this Act;
15 and (B) any member appointed to fill a vacancy occurring
16 prior to the expiration of the term for which his predecessor
17 was appointed, shall be appointed for the remainder of such
18 term. Any member of the Commission may be removed by
19 the President for inefficiency, neglect of duty, or malfeasance
20 in office. Each member, except the Chairman, shall receive
21 compensation at the rate of \$15,000 per annum; and the
22 Chairman shall receive compensation at the rate of \$17,500
23 per annum. No member of the Commission shall engage in
24 any other business, vocation, or employment than that of
25 serving as a member of the Commission.

1 (3) The principal office of the Commission shall be in
2 the District of Columbia, but the Commission or any duly
3 authorized representative may exercise any or all of its pow-
4 ers in any place. The Commission shall hold such meetings,
5 conduct such hearings, and receive such reports as may be
6 necessary to enable it to carry out the provisions of this Act.

7 (4) There are hereby established within the Com-
8 mission—

9 (A) a General Manager, who shall discharge such
10 of the administrative and executive functions of the
11 Commission as the Commission may direct. The Gen-
12 eral Manager shall be appointed by the President by
13 and with the advice and consent of the Senate, and shall
14 receive compensation at the rate of \$15,000 per annum.
15 The Commission may make recommendations to the
16 President with respect to the appointment or removal of
17 the General Manager.

18 (B) a Division of Research, a Division of Pro-
19 duction, a Division of Engineering, and a Division of
20 Military Application. Each division shall be under the
21 direction of a Director who shall be appointed by the
22 Commission, and shall receive compensation at the rate
23 of \$14,000 per annum. (2) *The Director of the Division*
24 *of Military Application shall be a member of the*
25 *armed forces.* The Commission shall require each such

1 division to exercise such of the Commission's powers
2 under this Act as the Commission may determine, except
3 that the authority granted under section 3 (a) of this
4 Act shall not be exercised by the Division of Research.

5 (b) GENERAL ADVISORY COMMITTEE.—There shall be
6 a General Advisory Committee to advise the Commission on
7 scientific and technical matters relating to materials, produc-
8 tion, and research and development, to be composed of nine
9 members, who shall be appointed from civilian life by the
10 President. Each member shall hold office for a term of six
11 years, except that (1) any member appointed to fill a
12 vacancy occurring prior to the expiration of the term for
13 which his predecessor was appointed, shall be appointed for
14 the remainder of such term; and (2) the terms of office of the
15 members first taking office after the date of the enactment
16 of this Act shall expire, as designated by the President at
17 the time of appointment, three at the end of two years, three
18 at the end of four years, and three at the end of six years,
19 after the date of the enactment of this Act. The Committee
20 shall designate one of its own members as Chairman. The
21 Committee shall meet at least four times in every calendar
22 year. The members of the Committee shall receive a per
23 diem compensation of \$50 for each day spent in meetings or
24 conferences, and all members shall receive their necessary

1 traveling or other expenses while engaged in the work of
2 the Committee.

3 (c) MILITARY LIAISON COMMITTEE.—There shall be
4 a Military Liaison Committee consisting of representatives
5 of the Departments of War and Navy, detailed or assigned
6 thereto, without additional compensation, by the Secretaries
7 of War and Navy in such number as they may determine.
8 The Commission shall advise and consult with the Committee
9 on all atomic energy matters which the Committee deems to
10 relate to military applications, including the development,
11 manufacture, use, and storage of bombs, the allocation of
12 fissionable material for military research, and the control
13 of information relating to the manufacture or utilization of
14 atomic weapons. The Commission shall keep the Committee
15 fully informed of all such matters before it and the Com-
16 mittee shall keep the Commission fully informed of all atomic
17 energy activities of the War and Navy Departments. The
18 Committee shall have authority to make written recommen-
19 dations to the Commission on matters relating to military
20 applications from time to time as it may deem appropriate.
21 If the Committee at any time concludes that any action,
22 proposed action, or failure to act of the Commission on such
23 matters is adverse to the responsibilities of the Departments
24 of War or Navy, derived from the Constitution, laws, and
25 treaties, the Committee may refer such action, proposed

1 action, or failure to act to the Secretaries of War and Navy.

2 If either Secretary concurs, he may refer the matter to the

3 President, whose decision shall be final.

4 **(3)(d)** *APPOINTMENT OF ARMY AND NAVY OFFICERS.*—

5 *Notwithstanding the provisions of section 1222 of the Re-*

6 *vised Statutes (U. S. C., 1940 edition, title 10, sec. 576),*

7 *section 212 of the Act entitled “An Act making appropria-*

8 *tions for the Legislative Branch of the Government for*

9 *the fiscal year ending June 30, 1933, and for other pur-*

10 *poses”, approved June 30, 1932, as amended (U. S. C.,*

11 *1940 edition, title 5, sec. 59a), section 2 of the Act entitled*

12 *“An Act making appropriations for the legislative, executive,*

13 *and judicial expenses of the Government for the fiscal year*

14 *ending June thirtieth, eighteen hundred and ninety-five, and*

15 *for other purposes”, approved July 31, 1894, as amended*

16 *(U. S. C., 1940 edition, title 5, sec. 62), or any other law,*

17 *not to exceed two active or retired officers of the Army or*

18 *the Navy may serve at the same time as members of the*

19 *Commission, and any active or retired officer of the Army*

20 *or the Navy may serve as Director of the Division of Mili-*

21 *tary Application established by subsection (a) (4) (B) of*

22 *this section, without prejudice to their commissioned status*

23 *as such officers. Any such officer serving as a member of*

24 *the Commission or as Director of the Division of Military*

25 *Application shall receive, in addition to his pay from the*

1 *United States as such officer, an amount equal to the differ-*
 2 *ence between such pay and the compensation prescribed in*
 3 *paragraph (2) or (4) (B), as the case may be, of sub-*
 4 *section (a) of this section.*

5 RESEARCH

6 SEC. 3. (a) RESEARCH ASSISTANCE.—The Commis-
 7 sion is directed to exercise its powers in such manner as
 8 to insure the continued conduct of research and develop-
 9 ment activities in the fields specified below by private or
 10 public institutions or persons and to assist in the acquisi-
 11 tion of an ever-expanding fund of theoretical and prac-
 12 tical knowledge in such fields. To this end the Commission
 13 is authorized and directed to make arrangements (including
 14 contracts, agreements, ~~(4) grants-in-aid,~~ and loans) for the
 15 conduct of research and development activities relating to—

16 (1) nuclear processes;

17 (2) the theory and production of atomic energy,
 18 including processes, materials, and devices related to
 19 such production;

20 (3) utilization of fissionable and radioactive ma-
 21 terials for medical, biological, health, or military pur-
 22 poses;

23 (4) utilization of fissionable and radioactive ma-
 24 terials and processes entailed in the production of such

1 materials for all other purposes, including industrial
2 uses; and

3 (5) the protection of health during research and
4 production activities.

5 The Commission may make such arrangements without re-
6 gard to the provisions of section 3709 of the Revised
7 Statutes (U. S. C., title 41, sec. 5) upon certification by
8 the Commission that such action is necessary in the interest
9 of the common defense and security, or upon a showing
10 that advertising is not reasonably practicable, and may
11 make partial and advance payments under such arrange-
12 ments, and may make available for use in connection there-
13 with such of its equipment and facilities as it may deem
14 desirable. Such arrangements shall contain such provisions
15 to protect health, to minimize danger from explosion and
16 other hazards to life or property, and to require the report-
17 ing and to permit the inspection of work performed there-
18 under, as the Commission may determine; but shall not
19 contain any provisions or conditions which prevent the
20 dissemination of scientific or technical information, except
21 to the extent such dissemination is prohibited by law.

22 (b) RESEARCH BY THE COMMISSION.—The Commis-
23 sion is authorized and directed to conduct, through its own
24 facilities, activities and studies of the types specified in sub-
25 section (a) above.

1 PRODUCTION OF FISSIONABLE MATERIAL

2 SEC. 4. (a) DEFINITION.—As used in this Act, the
3 term “produce”, when used in relation to fissionable material,
4 means to manufacture, produce, or refine fissionable material,
5 as distinguished from source materials as defined in section
6 5 (b) (1), or to separate fissionable material from other
7 substances in which such material may be contained or to
8 produce new fissionable material.

9 (b) PROHIBITION.—It shall be unlawful for any person
10 to own any facilities for the production of fissionable material
11 or for any person to produce fissionable material, except to
12 the extent authorized by subsection (c).

13 (c) OWNERSHIP AND OPERATION OF PRODUCTION
14 FACILITIES.—

15 (1) OWNERSHIP OF PRODUCTION FACILITIES.—
16 The Commission (5), *as agent of and on behalf of the*
17 *United States*, shall be the exclusive owner of all
18 facilities for the production of fissionable material other
19 than facilities which (A) are useful in the conduct of
20 research and development activities in the fields speci-
21 fied in section 3, and (B) do not, in the opinion of
22 the Commission, have a potential production rate ade-
23 quate to enable the operator of such facilities to produce
24 within a reasonable period of time a sufficient quantity

1 of fissionable material to produce an atomic bomb or
2 any other atomic weapon.

3 (2) OPERATION OF THE COMMISSION'S PRODUC-
4 TION FACILITIES.—The Commission is authorized and
5 directed to produce or to provide for the production of
6 fissionable material in its own facilities. To the extent
7 deemed necessary, the Commission is authorized to make,
8 or to continue in effect, contracts with persons obli-
9 gating them to produce fissionable material in facili-
10 ties owned by the Commission. The Commission is also
11 authorized to enter into research and development con-
12 tracts authorizing the contractor to produce fissionable
13 material in facilities owned by the Commission to the
14 extent that the production of such fissionable material
15 may be incident to the conduct of research and de-
16 velopment activities under such contracts. Any contract
17 entered into under this section shall contain provisions
18 (A) prohibiting the contractor with the Commission
19 from subcontracting any part of the work he is obligated
20 to perform under the contract, *(6)except as authorized*
21 *by the Commission*, and (B) obligating the contractor
22 to make such reports to the Commission as it
23 may deem appropriate with respect to his activities
24 under the contract, to submit to frequent inspection by
25 employees of the Commission of all such activities, and

to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) OPERATION OF OTHER PRODUCTION FACILITIES.—Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) IRRADIATION OF MATERIALS.—For the purpose of increasing the supply of radioactive materials, the Commission ~~(7)is~~ *and persons lawfully producing or utilizing fissionable material* are authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

(e) MANUFACTURE OF PRODUCTION FACILITIES.—Unless authorized by a license issued by the Commission, no

1 person may manufacture, produce, transfer, or acquire any
2 facilities for the production of fissionable material. Licenses
3 shall be issued in accordance with such procedures as the
4 Commission may by regulation establish and shall be issued in
5 accordance with such standards and upon such conditions as
6 will restrict the production and distribution of such facilities
7 to effectuate the policies and purposes of this Act. Nothing
8 in this section shall be deemed to require a license for such
9 manufacture, production, transfer, or acquisition incident to
10 or for the conduct of research or development activities in the
11 United States of the types specified in section 3, or to prohibit
12 the Commission from manufacturing or producing such facil-
13 ities for its own use.

14 CONTROL OF MATERIALS

15 SEC. 5. (a) FISSIONABLE MATERIALS.—

16 (1) DEFINITION.—As used in this Act, the term “fis-
17 sionable material” means plutonium, uranium enriched in the
18 isotope 235, any other material which the Commission
19 determines to be capable of releasing substantial quantities
20 of energy through nuclear chain reaction of the material, or
21 any material artificially enriched by any of the foregoing;
22 but does not include source materials, as defined in section
23 5 (b) (1).

24 (2) GOVERNMENT OWNERSHIP OF ALL FISSIONABLE
25 MATERIAL.—All right, title, and interest within or under

1 the jurisdiction of the United States, in or to any fissionable
2 material, now or hereafter produced, shall be the property
3 of the Commission, and shall be deemed to be vested in
4 the Commission by virtue of this Act. Any person owning
5 any interest in any fissionable material at the time of the
6 enactment of this Act, or owning any interest in any ma-
7 terial at the time when such material is hereafter determined
8 to be a fissionable material, or who lawfully produces any
9 fissionable material incident to privately financed research
10 or development activities, shall be paid just compensation
11 therefor. The Commission may, by action consistent with
12 the provisions of paragraph (4) below, authorize any such
13 person to retain possession of such fissionable material, but
14 no person shall have any title in or to any fissionable material.

15 (3) PROHIBITION.—It shall be unlawful for any person,
16 after sixty days from the effective date of this Act to (A)
17 possess or transfer any fissionable material, except as author-
18 ized by the Commission, or (B) export from or import into
19 the United States any fissionable material, or (C) directly
20 or indirectly engage in the production of any fissionable
21 material outside of the United States.

22 (4) DISTRIBUTION OF FISSIONABLE MATERIAL.—
23 Without prejudice to its continued ownership thereof, the
24 Commission is authorized to distribute fissionable material (8),
25 *owned by it* with or without charge, to applicants requesting

1 such material (A) for the conduct of research or development
2 activities either independently or under contract or other
3 arrangement with the Commission, (B) for use in medical
4 therapy, or (C) for use pursuant to a license issued under the
5 authority of section 7. Such material shall be distributed in
6 such quantities and on such terms that no applicant will be
7 enabled to obtain an amount sufficient to construct a bomb
8 or other military weapon. The Commission is directed to
9 distribute sufficient fissionable material to permit the con-
10 duct of widespread independent research and development
11 activity, to the maximum extent practicable. In deter-
12 mining the quantities of fissionable material to be distributed,
13 the Commission shall make such provisions for its own needs
14 and for the conservation of fissionable material as it may
15 determine to be necessary in the national interest for the
16 future development of atomic energy. The Commission shall
17 not distribute any material to any applicant, and shall recall
18 any distributed material from any applicant, who is not
19 equipped to observe or who fails to observe such safety
20 standards to protect health and to minimize danger from
21 explosion or other hazard to life or property as may be
22 established by the Commission, or who uses such material
23 in violation of law or regulation of the Commission or in a
24 manner other than as disclosed in the application therefor.

25 (5) The Commission is authorized to purchase or other-

1 wise acquire any fissionable material or any interest therein
2 outside the United States, or any interest in facilities for the
3 production of fissionable material, or in real property on
4 which such facilities are located, without regard to the pro-
5 visions of section 3709 of the Revised Statutes (U. S. C.,
6 title 41, sec. 5) upon certification by the Commission that
7 such action is necessary in the interest of the common defense
8 and security, or upon a showing that advertising is not rea-
9 sonably practicable, and partial and advance payments may
10 be made under contracts for such purposes. The Commis-
11 sion is further authorized to take, requisition, or condemn,
12 or otherwise acquire any interest in such facilities or real
13 property, and just compensation shall be made therefor.

14 (b) SOURCE MATERIALS.—

15 (1) DEFINITION.—As used in this Act, the term
16 “source material” means uranium, thorium, or any other
17 material which is determined by the Commission, with
18 the approval of the President, to be peculiarly essential to
19 the production of fissionable materials; but includes ores
20 only if they contain one or more of the foregoing materials
21 in such concentration as the Commission may by regulation
22 determine from time to time.

23 (2) LICENSE FOR TRANSFERS REQUIRED.—Unless
24 authorized by a license issued by the Commission, no person

1 may transfer or deliver (9) ~~and no person may receive~~
2 ~~possession of or title to,~~ *receive possession of or title to,* or
3 *export from the United States* any source material after
4 removal from its place of deposit in nature, except that
5 licenses shall not be required for quantities of source ma-
6 terials which, in the opinion of the Commission, are unim-
7 portant.

8 (3) ISSUANCE OF LICENSES.—The Commission shall
9 establish such standards for the issuance, refusal, or revoca-
10 tion of licenses as it may deem necessary to assure adequate
11 source materials for production, research, or development
12 activities pursuant to this Act or to prevent the use of such
13 materials in a manner inconsistent with the national welfare.
14 Licenses shall be issued in accordance with such procedures
15 as the Commission may by regulation establish.

16 (4) REPORTING.—The Commission is authorized to
17 issue such regulations or orders requiring reports of owner-
18 ship, possession, extraction, refining, shipment, or other han-
19 dling of source materials as it may deem necessary, except
20 that such reports shall not be required with respect to (A)
21 any source material prior to removal from its place of deposit
22 in nature, or (B) quantities of source materials which in the
23 opinion of the Commission are unimportant or the reporting
24 of which will discourage independent prospecting for new
25 deposits.

1 (5) ACQUISITION.—The Commission is authorized and
2 directed to purchase, take, requisition, condemn, or otherwise
3 acquire, supplies of source materials or any interest in real
4 property containing deposits of source materials to the extent
5 it deems necessary to effectuate the provisions of this Act.
6 Any purchase made under this paragraph may be made
7 without regard to the provisions of section 3709 of the Re-
8 vised Statutes (U. S. C., title 41, sec. 5) upon certification
9 by the Commission that such action is necessary in the
10 interest of the common defense and security, or upon a show-
11 ing that advertising is not reasonably practicable, and partial
12 and advance payments may be made thereunder. The Com-
13 mission may establish guaranteed prices for all source mate-
14 rials delivered to it within a specified time. Just compensa-
15 tion shall be made for any property taken, requisitioned, or
16 condemned under this paragraph.

17 (6) EXPLORATION.—The Commission is authorized to
18 conduct and enter into contracts for the conduct of exploratory
19 operations, investigations, and inspections to determine the
20 location, extent, mode of occurrence, use, or conditions of
21 deposits or supplies of source materials, making just compen-
22 sation for any damage or injury occasioned thereby. Such
23 exploratory operations may be conducted only with the
24 consent of the owner, but such investigations and inspections
25 may be conducted with or without such consent.

1 (7) PUBLIC LANDS.—All uranium, thorium, and all
 2 other materials determined pursuant to paragraph (1) of
 3 this subsection to be peculiarly essential to the production of
 4 fissionable material, contained, in whatever concentration, in
 5 deposits in the public lands are hereby reserved for the use
 6 of the United States (10); ~~except that with respect to any~~
 7 ~~location, entry, or settlement made prior to the date of enact-~~
 8 ~~ment of this Act no reservation shall be deemed to have been~~
 9 ~~made, if such reservation would deprive any person of any~~
 10 ~~existing or inchoate rights or privileges to which he would~~
 11 ~~otherwise be entitled to would otherwise enjoy subject~~
 12 ~~to valid claims existing on the date of the enactment~~
 13 ~~of this Act: Provided, however, That no (11)person~~
 14 ~~individual, corporation, partnership, or association, which~~
 15 ~~had any part, directly or indirectly, in the develop-~~
 16 ~~ment of the atomic bomb project, may benefit by any~~
 17 ~~location, entry, or settlement upon the public domain made~~
 18 ~~after such (12)person individual, corporation, partnership, or~~
 19 ~~association took part in such project (13)unless first author-~~
 20 ~~ized so to do by the Commission.~~ The Secretary of the
 21 Interior shall cause to be inserted in every patent, conveyance,
 22 lease, permit, or other authorization hereafter granted to use
 23 the public lands or their mineral resources, under any of which
 24 there might result the extraction of any materials so reserved,
 25 a reservation to the United States of all such materials,

1 whether or not of commercial value, together with the right of
2 the United States through its authorized agents or repre-
3 sentatives at any time to enter upon the land and prospect
4 for, mine, and remove the same, making just compen-
5 sation for any damage or injury occasioned thereby. Any
6 lands so patented, conveyed, leased, or otherwise disposed of
7 may be used, and any rights under any such permit or
8 authorization may be exercised, as if no reservation of such
9 materials had been made under this subsection; except that,
10 when such use results in the extraction of any such material
11 from the land in quantities which may not be transferred or
12 delivered without a license under this subsection, such ma-
13 terial shall be the property of the Commission and the Com-
14 mission may require delivery of such material to it by any
15 possessor thereof after such material has been separated as
16 such from the ores in which it was contained. If the Com-
17 mission requires the delivery of such material to it, it shall
18 pay to the person mining or extracting the same, or to
19 such other person as the Commission determines to be
20 entitled thereto, such sums, including profits, as the Com-
21 mission deems fair and reasonable for the discovery, mining,
22 development, production, extraction, and other services per-
23 formed with respect to such material prior to such delivery
24 but such payment shall not include any amount on account
25 of the value of such material before removal from its place

1 of deposit in nature. If the Commission does not require
2 delivery of such material to it, the reservation made pur-
3 suant to this paragraph shall be of no further force or effect.

4 (c) BYPRODUCT MATERIALS.—

5 (1) DEFINITION.—As used in this Act, the term
6 “byproduct material” means any radioactive material (ex-
7 cept fissionable material) yielded in or made radioactive by
8 exposure to the radiation incident to the processes of produc-
9 ing or utilizing fissionable material.

10 (2) DISTRIBUTION.—The Commission is authorized
11 to distribute, with or without charge, byproduct materials
12 to applicants seeking such materials for research or develop-
13 ment activity, medical therapy, industrial uses, or such other
14 useful applications as may be developed. In distributing
15 such materials, the Commission shall give preference to
16 applicants proposing to use such materials in the conduct of
17 research and development activity or medical therapy. The
18 Commission shall not distribute any byproduct materials to
19 any applicant, and shall recall any distributed materials from
20 any applicant, who is not equipped to observe or who fails
21 to observe such safety standards to protect health as may be
22 established by the Commission or who uses such materials
23 in violation of law or regulation of the Commission or in a
24 manner other than as disclosed in the application therefor.

25 (d) GENERAL PROVISIONS.—

1 ~~(14)(1)~~ The Commission shall not distribute any fission-
 2 able or source material to any person for a use which is not
 3 under or within the jurisdiction of the United States or
 4 to any foreign government.

5 (1) *The Commission shall not—*

6 (A) *Distribute any fissionable material to (i) any*
 7 *person for a use which is not under or within the jurisd-*
 8 *iction of the United States, (ii) any foreign govern-*
 9 *ment, or (iii) any person within the United States if,*
 10 *in the opinion of the Commission, the distribution of*
 11 *such fissionable material to such person would be inimical*
 12 *to the common defense and security.*

13 (B) *License any person to transfer or deliver, re-*
 14 *ceive possession of or title to, or export from the United*
 15 *States any source material if, in the opinion of the Com-*
 16 *mission, the issuance of a license to such person for such*
 17 *purpose would be inimical to the common defense and*
 18 *security.*

19 ~~(15)(2)~~ The Commission shall establish by regulation a
 20 procedure by which any person who is dissatisfied with
 21 the distribution or refusal to distribute to him, or the recall
 22 from him, of any fissionable or byproduct materials or with
 23 the issuance, refusal, or revocation of a license to him for the
 24 transfer or receipt of source materials may obtain a review
 25 of such determination by a board of appeal consisting of three

1 members appointed by the Commission. The Commission
2 may in its discretion review and revise any decision of such
3 board of appeal.

4 MILITARY APPLICATIONS OF ATOMIC
5 ENERGY

6 SEC. 6. (a) AUTHORITY.—The Commission is author-
7 ized to—

8 (1) conduct experiments and do research and de-
9 velopment work in the military application of atomic
10 energy; and

11 (2) engage in the production of atomic bombs,
12 atomic bomb parts, or other military weapons utilizing
13 fissionable materials; except that such activities shall be
14 carried on only to the extent that the express consent
15 and direction of the President of the United States
16 has been obtained, which consent and direction shall
17 be obtained at least once each year.

18 The President from time to time may direct the Commission
19 (16)(1) to deliver such quantities of (17)fissionable mate-
20 rials or weapons to the armed forces for such use as he deems
21 necessary in the interest of national defense (18)or (2) to
22 authorize the armed forces to manufacture, produce, or ac-
23 quire any equipment or device utilizing fissionable material or
24 atomic energy as a military weapon.

1 (b) PROHIBITION.—It shall be unlawful for any per-
2 son (19), *except as provided in section 6 (a)*, to manufac-
3 ture, produce, transfer, or acquire any equipment or device
4 utilizing fissionable material or atomic energy as a military
5 weapon, except as may be authorized by the Commission.
6 Nothing in this subsection shall be deemed to modify the pro-
7 visions of section 4 of this Act, or to prohibit research activi-
8 ties in respect of military weapons, or to permit the export
9 of any such equipment or device.

10 UTILIZATION OF ATOMIC ENERGY

11 SEC. 7. (a) LICENSE REQUIRED.—It shall be unlawful,
12 except as provided in sections 5 (a) (4) (A) or (B) or
13 6 (a), for any person to manufacture, produce, or export
14 any equipment or device utilizing fissionable material or
15 atomic energy or to utilize fissionable material or atomic
16 energy with or without such equipment or device, except
17 under and in accordance with a license issued by the Com-
18 mission authorizing such manufacture, production, export, or
19 utilization. No license may permit any such activity if fis-
20 sionable material is produced incident to such activity, except
21 as provided in sections 3 and 4. Nothing in this section
22 shall be deemed to require a license for the conduct of research
23 or development activities relating to the manufacture of such
24 equipment or devices or the utilization of fissionable material

1 or atomic energy, or for the manufacture or use of equipment
2 or devices for medical therapy.

3 (b) REPORT TO CONGRESS.—Whenever in its opinion
4 any industrial, commercial, or other nonmilitary use of fis-
5 sionable material or atomic energy has been sufficiently
6 developed to be of practical value, the Commission shall pre-
7 pare a report to the President stating all the facts with
8 respect to such use, the Commission's estimate of the social,
9 political, economic, and international effects of such use and
10 the Commission's recommendations for necessary or desirable
11 supplemental legislation. The President shall then transmit
12 this report to the Congress together with his recommenda-
13 tions. No license for any manufacture, production, export,
14 or use shall be issued by the Commission under this section
15 until after (1) a report with respect to such manufacture,
16 production, export, or use has been filed with the Congress;
17 and (2) a period of ninety days in which the Congress was
18 in session has elapsed after the report has been so filed. In
19 computing such period of ninety days, there shall be excluded
20 the days on which either House is not in session because of
21 an adjournment of more than three days.

22 (c) ISSUANCE OF LICENSES.—After such ninety-day
23 period, unless hereafter prohibited by law, the Commission
24 may license such manufacture, production, export, or use in
25 accordance with such procedures and subject to such condi-

tions as it may by regulation establish to effectuate the provisions of this Act. The Commission is authorized and directed to issue licenses on a nonexclusive basis and to supply to the extent available appropriate quantities of fissionable material to licensees (1) whose proposed activities will serve some useful purpose proportionate to the quantities of fissionable material to be consumed; (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish; and (3) who agree to make available to the Commission such technical information and data concerning their activities pursuant to such licenses as the Commission may determine necessary to encourage similar activities by as many licensees as possible. Each such license shall be issued for a specified period, not ~~(20) to exceed~~ *less than* one year, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon the expiration of such period. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in

1 consultation with the Attorney General, may determine.
 2 The Commission shall report promptly to the Attorney Gen-
 3 eral any information it may have with respect to any utili-
 4 zation of fissionable material or atomic energy which appears
 5 to have these results. No license may be given to any
 6 person for activities which are not under or within the
 7 jurisdiction of the United ~~(21)~~States ~~or~~ States, to any foreign
 8 government ~~(22)~~, *or to any person within the United States*
 9 *if, in the opinion of the Commission, the issuance of a license*
 10 *to such person would be inimical to the common defense and*
 11 *security.*

12 (d) BYPRODUCT POWER.—If energy which may be
 13 utilized is produced in the production of fissionable material,
 14 such energy may be used by the Commission, transferred
 15 to other Government agencies, or sold to public or private
 16 utilities under contracts providing for reasonable resale prices.

17 INTERNATIONAL ARRANGEMENTS

18 SEC. 8. (a) DEFINITION.—As used in this Act, the
 19 term “international arrangement” shall mean any treaty
 20 approved by the Senate or international agreement ~~(23)~~*here-*
 21 *after* approved by the Congress, during the time such treaty
 22 or agreement is in full force and effect.

23 (b) EFFECT OF INTERNATIONAL ARRANGEMENTS.—
 24 Any provision of this Act or any action of the Commission
 25 to the extent that it conflicts with the provisions of any

1 international arrangement made after the date of enactment
2 of this Act shall be deemed to be of no further force or effect.

3 (c) POLICIES CONTAINED IN INTERNATIONAL AR-
4 RANGEMENTS.—In the performance of its functions under
5 this Act, the Commission shall give maximum effect to the
6 policies contained in any such international arrangement.

7 PROPERTY OF THE COMMISSION

8 SEC. 9. (a) The President shall direct the transfer to
9 the Commission of all interests owned by the United States
10 or any Government agency in the following property:

11 (1) All fissionable material; all atomic weapons and
12 parts thereof; all facilities, equipment, and materials for
13 the processing, production, or utilization of fissionable ma-
14 terial or atomic energy; all processes and technical infor-
15 mation of any kind, and the source thereof (including data,
16 drawings, specifications, patents, patent applications, and
17 other sources) relating to the processing, production, or utili-
18 zation of fissionable material or atomic energy; and all con-
19 tracts, agreements, leases, patents, applications for patents,
20 inventions and discoveries (whether patented or unpatented),
21 and other rights of any kind concerning any such items;

22 (2) All facilities, equipment, and materials, devoted
23 primarily to atomic energy research and development; and

24 (3) Such other property owned by or in the custody

1 or control of the Manhattan Engineer District or other Gov-
2 ernment agencies as the President may determine.

3 (b) In order to render financial assistance to those
4 States and localities in which the activities of the Com-
5 mission are carried on and in which the Commission has ac-
6 quired property previously subject to State and local tax-
7 ation, the Commission is authorized to make payments to
8 State and local governments in lieu of property taxes. Such
9 payments may be in the amounts, at the times, and upon the
10 terms the Commission deems appropriate, but the Commis-
11 sion shall be guided by the policy of not making payments
12 in excess of the taxes which would have been payable for
13 such property in the condition in which it was acquired,
14 except in cases where special burdens have been cast upon
15 the State or local government by activities of the Commission,
16 the Manhattan Engineer District or their agents. In any
17 such case, any benefit accruing to the State or local gov-
18 ernment by reason of such activities shall be considered in
19 determining the amount of the payment. The Commission,
20 and the property, activities, and income of the Commission,
21 are hereby expressly exempted from taxation in any manner
22 or form by any State, county, municipality, or any sub-
23 division thereof.

24 CONTROL OF INFORMATION

25 SEC. 10. (a) POLICY,—It shall be the policy of the

1 Commission to control the dissemination of restricted data in
2 such a manner as to assure the common defense and security.
3 Consistent with such policy, the Commission shall be guided
4 by the following principles:

5 ~~(24)(1)~~ That information with respect to the use of
6 atomic energy for industrial purposes should be shared
7 with other nations on a reciprocal basis as soon as the
8 Congress declares by joint resolution that effective and
9 enforceable international safeguards against the use of
10 such energy for destructive purposes have been estab-
11 lished; and

12 ~~(25)(2)~~ That the dissemination of scientific and tech-
13 nical information relating to atomic energy should be
14 permitted and encouraged so as to provide that free
15 interchange of ideas and criticisms which is essential to
16 scientific progress.

17 ~~(26)(b)~~ DISSEMINATION.—The Commission is authorized
18 and directed to establish such information services, publica-
19 tions, libraries, and other registers of available information
20 as it may deem necessary or desirable to provide for the dis-
21 semination of information in accordance with subsection (a).

22 ~~(27)(e)~~ (b) RESTRICTIONS.—

23 (1) The term “restricted data” as used in this section
24 means all data concerning the manufacture or utilization of
25 atomic weapons, the production of fissionable material, or the

1 use of fissionable material in the production of power, but
2 shall not include any data which the Commission (28)by
3 *unanimous vote* from time to time determines may be pub-
4 lished without adversely affecting the common defense and
5 security.

6 (2) Whoever, lawfully or unlawfully, having posses-
7 sion of, access to, control over, or being entrusted with, any
8 document, writing, sketch, photograph, plan, model, instru-
9 ment, appliance, note or information involving or incorporat-
10 ing restricted data—

11 (A) communicates, transmits, or discloses the same
12 to any individual or person, or attempts or conspires to
13 do any of the foregoing, with intent to injure the
14 United States or with intent to secure an advantage
15 to any foreign nation, upon conviction thereof, shall be
16 punished by (29)*death, or by* a fine of not more than
17 \$20,000 or imprisonment for not (30)*less than ten years*
18 *or more than twenty years, or both;*

19 (B) communicates, transmits, or discloses the same
20 to any individual or person, or attempts or conspires to
21 do any of the foregoing, with reason to believe such data
22 will be utilized to injure the United States or to secure an
23 advantage to any foreign nation, shall, upon conviction,
24 be punished by a fine of not more than \$10,000 or
25 imprisonment for not more than ten years, or both.

1 (3) Whoever, with intent to injure the United States
 2 or with intent to secure an advantage to any foreign nation,
 3 acquires or attempts or conspires to acquire any document,
 4 writing, sketch, photograph, plan, model, instrument, ap-
 5 pliance, note or information involving or incorporating
 6 restricted data shall, upon conviction thereof, be punished
 7 by ~~(31)~~*death, or by* a fine of not more than \$20,000 or
 8 imprisonment for not ~~(32)~~*less than ten years or more than*
 9 *twenty years, or both.*

10 (4) Whoever, with intent to injure the United States or
 11 with intent to secure an advantage to any foreign nation,
 12 removes, conceals, tampers with, alters, mutilates, or destroys
 13 any document, writing, sketch, photograph, plan, model, in-
 14 strument, appliance, or note involving or incorporating re-
 15 stricted data and used by any individual or person in
 16 connection with the production of fissionable material, or
 17 research or development relating to atomic energy, conducted
 18 by the United States, or financed in whole or in part by
 19 Federal funds, or conducted with the aid of fissionable
 20 material, shall be punished by ~~(33)~~*death, or by* a fine of not
 21 more than \$20,000 or imprisonment for not ~~(34)~~*less than*
 22 *ten years or more than twenty years or both.*

23 ~~(35)-(5)~~ No person shall be prosecuted for any violation
 24 under this section unless and until the Attorney General of

1 the United States has advised and consulted with the Com-
 2 mission with respect to such prosecution.

3 (5) *The Commission shall make no contract under sec-*
 4 *tions 3 or 4; shall issue no license to any person nor employ*
 5 *any person until the Federal Bureau of Investigation shall*
 6 *have first made an investigation of the character and asso-*
 7 *ciations of such person and certified that the character of such*
 8 *contractor licensee or employee is such as not to endanger the*
 9 *common defense or security.*

10 (6) This section shall not exclude the applicable pro-
 11 visions of any other laws, except that no Government agency
 12 shall take any action under such other laws inconsistent with
 13 the provisions of this section.

14 ~~(36)~~(d) (c) INSPECTIONS, RECORDS, AND REPORTS.—The
 15 Commission is—

16 (1) authorized by regulation or order to require
 17 such reports and the keeping of such records with
 18 respect to, and to provide for such inspections of, activ-
 19 ities and studies of types specified in section 3 and of
 20 activities under licenses issued pursuant to section 7 as
 21 may be necessary to effectuate the purposes of this Act;

22 (2) authorized and directed by regulation or order
 23 to require regular reports and records with respect to,
 24 and to provide for frequent inspections of, the production

1 of fissionable material in the conduct of research and
2 development activities.

3 PATENTS AND INVENTIONS

4 ~~(37)~~SEC. 11. (a) PRODUCTION AND MILITARY UTILIZA-
5 TION.

6 ~~(1)~~ No patent shall hereafter be granted for any inven-
7 tion or discovery which is useful solely in the production of
8 fissionable material or in the utilization of fissionable material
9 or atomic energy for a military weapon. Any patent granted
10 for any such invention or discovery is hereby revoked, and
11 just compensation shall be made therefor.

12 ~~(2)~~ No patent hereafter granted shall confer any rights
13 with respect to any invention or discovery to the extent that
14 such invention or discovery is used in the production of fis-
15 sionable material or in the utilization of fissionable material
16 or atomic energy for a military weapon. Any rights con-
17 ferred by any patent heretofore granted for any invention or
18 discovery are hereby revoked to the extent that such inven-
19 tion or discovery is so used, and just compensation shall be
20 made therefor.

21 ~~(3)~~ Any person who has made or hereafter makes any
22 invention or discovery useful in the production of fissionable
23 material or in the utilization of fissionable material or atomic
24 energy for a military weapon shall file with the Commission

1 a report containing a complete description thereof, unless such
 2 invention or discovery is described in an application for a
 3 patent filed in the Patent Office by such person within the
 4 time required for the filing of such report. The report cover-
 5 ing any such invention or discovery shall be filed on or before
 6 whichever of the following is the latest: ~~(A)~~ The sixtieth day
 7 after the date of enactment of this Act; ~~(B)~~ the sixtieth day
 8 after the completion of such invention or discovery; or ~~(C)~~
 9 the sixtieth day after such person first discovers or first has
 10 reason to believe that such invention or discovery is useful
 11 in such production or utilization.

12 ~~(b)~~ USE OF INVENTIONS FOR RESEARCH.—No patent
 13 hereafter granted shall confer any rights with respect to
 14 any invention or discovery to the extent that such invention
 15 or discovery is used in the conduct of research or develop-
 16 ment activities in the fields specified in section 3. Any
 17 rights conferred by any patent heretofore granted for
 18 any invention or discovery are hereby revoked to the extent
 19 that such invention or discovery is so used, and just compen-
 20 sation shall be made therefor.

21 ~~(c)~~ NONMILITARY UTILIZATION.—

22 ~~(1)~~ It shall be the duty of the Commission to declare
 23 any patent to be affected with the public interest if ~~(A)~~ the
 24 invention or discovery covered by the patent utilizes or is
 25 essential in the utilization of fissionable material or atomic

1 energy; and ~~(B)~~ the licensing of such invention or discovery
2 under this subsection is necessary to effectuate the policies
3 and purposes of this Act.

4 ~~(2)~~ Whenever any patent has been declared, pursuant
5 to paragraph ~~(1)~~, to be affected with the public interest—

6 ~~(A)~~ The Commission is hereby licensed to use the
7 invention or discovery covered by such patent in per-
8 forming any of its powers under this Act; and

9 ~~(B)~~ Any person to whom a license has been issued
10 under section 7 is hereby licensed to use the invention
11 or discovery covered by such patent to the extent such
12 invention or discovery is used by him in carrying on
13 the activities authorized by his license under section 7.

14 The owner of the patent shall be entitled to a reasonable
15 royalty fee for any use of an invention or discovery licensed
16 by this subsection. Such royalty fee may be agreed upon
17 by such owner and the licensee, or in the absence of such
18 agreement shall be determined by the Commission.

19 ~~(3)~~ No court shall have jurisdiction or power to stay,
20 restrain, or otherwise enjoin the use of any invention or
21 discovery by a licensee, to the extent that such use is licensed
22 by paragraph ~~(2)~~ above, on the ground of infringement of
23 any patent. If in any action for infringement against
24 such licensee the court shall determine that the defendant
25 is exercising such license, the measure of damages shall be

1 the royalty fee determined pursuant to this section, together
 2 with such costs, interest, and reasonable attorney's fees as
 3 may be fixed by the court. If no royalty fee has been
 4 determined, the court shall stay the proceeding until the
 5 royalty fee is determined pursuant to this section. If any
 6 such licensee shall fail to pay such royalty fee, the patentee
 7 may bring an action in any court of competent jurisdiction
 8 for such royalty fee, together with such costs, interest, and
 9 reasonable attorney's fees as may be fixed by the court.

10 ~~(d)~~ ACQUISITION OF PATENTS.—The Commission is
 11 authorized to purchase, or to take, requisition, or condemn,
 12 and make just compensation for, (1) any invention or dis-
 13 covery which is useful in the production of fissionable
 14 material or in the utilization of fissionable material or atomic
 15 energy for a military weapon, or which utilizes or is essential
 16 in the utilization of fissionable material or atomic energy,
 17 or (2) any patent or patent application covering any such
 18 invention or discovery. The Commissioner of Patents shall
 19 notify the Commission of all applications for patents hereto-
 20 fore or hereafter filed which in his opinion disclose such in-
 21 ventions or discoveries and shall provide the Commission
 22 access to all such applications.

23 ~~(e)~~ COMPENSATION AWARDS, AND ROYALTIES.—

24 (1) PATENT COMPENSATION BOARD.—The Commis-
 25 sion shall designate a Patent Compensation Board, consisting

1 of two or more employees of the Commission, to consider
2 applications under this subsection.

3 ~~(2)~~ ELIGIBILITY.—

4 ~~(A)~~ Any owner of a patent licensed under sub-
5 section ~~(c)~~ ~~(2)~~ or any licensee thereunder may make
6 application to the Commission for the determination of
7 a reasonable royalty fee in accordance with such pro-
8 cedures as it by regulation may establish.

9 ~~(B)~~ Any person seeking to obtain the just com-
10 pensation provided in subsections ~~(a)~~, ~~(b)~~, or ~~(d)~~
11 shall make application therefor to the Commission in
12 accordance with such procedures as it may by regulation
13 establish.

14 ~~(C)~~ Any person making any invention or discovery
15 useful in the production of fissionable material or in the
16 utilization of fissionable material or atomic energy for a
17 military weapon who is not entitled to compensation
18 therefor under subsection ~~(a)~~ and who has complied
19 with subsection ~~(a)~~ ~~(3)~~ above may make application
20 to the Commission for, and the Commission may grant,
21 an award.

22 ~~(D)~~ Any person making application under this sub-
23 section shall have the right to be represented by counsel.

24 ~~(3)~~ STANDARDS.—

25 ~~(A)~~ In determining such reasonable royalty fee,

1 the Commission shall take into consideration any defense,
2 general or special, that might be pleaded by a defendant
3 in an action for infringement, the extent to which, if any,
4 such patent was developed through federally financed
5 research, the degree of utility, novelty, and importance
6 of the invention or discovery, and may consider the cost
7 to the owner of the patent of developing such invention
8 or discovery or acquiring such patent.

9 (B) In determining what constitutes just compensa-
10 tion under subsection (a), (b), or (d) above, the Com-
11 mission shall take into account the considerations set
12 forth in paragraph (A) above, and the actual use of
13 such invention or discovery, and may determine that
14 such compensation be paid in periodic payments or in a
15 lump sum.

16 (C) In determining the amount of any award under
17 paragraph (2) (C) of this subsection, the Commission
18 shall take into account the considerations set forth in
19 paragraph (A) above, and the actual use of such inven-
20 tion or discovery. Awards so made may be paid by the
21 Commission in periodic payments or in a lump sum.

22 (4) JUDICIAL REVIEW. Any person aggrieved by any
23 determination of the Commission of an award or of a reason-
24 able royalty fee may obtain a review of such determination in
25 the Court of Appeals for the District of Columbia by filing in

1 such court, within thirty days after notice of such determina-
2 tion, a written petition praying that such determination be set
3 aside. A copy of such petition shall be forthwith served upon
4 the Commission and thereupon the Commission shall file with
5 the court a certified transcript of the entire record in the
6 proceeding, including the findings and conclusions upon
7 which the determination was based. Upon the filing of
8 such transcript the court shall have exclusive jurisdiction
9 upon the record certified to it to affirm the determination in
10 its entirety or set it aside and remand it to the Commission
11 for further proceedings. The findings of the Commission
12 as to the facts, if supported by substantial evidence, shall
13 be conclusive. The court's judgment shall be final, subject,
14 however, to review by the Supreme Court of the United
15 States upon writ of certiorari on petition therefor under
16 section 240 of the Judicial Code (U. S. C., title 28, sec.
17 347), by the Commission or any party to the court pro-
18 ceeding.

19 *SEC. 11. (a) The Commission is authorized to pur-*
20 *chase, for the manufacture or use by or for the United States*
21 *Government, any and all rights in and to any invention or*
22 *discovery, or application for patent or patent thereon, relating*
23 *to research on or the production of fissionable material or*
24 *the utilization of fissionable material or atomic energy.*

25 *(b) The Commission is authorized to condemn, and*

1 to determine and make just compensation for, any and all
2 rights in and to any invention or discovery relating to re-
3 search on or the production of fissionable materials or the
4 utilization of fissionable materials or atomic energy that
5 affects the national defense and security: Provided, however,
6 That upon the determination by the Commission that the
7 national defense or security is no longer involved, any and
8 all rights in and to such invention or discovery shall revert
9 to the owner, subject to a nonexclusive, irrevocable and non-
10 transferrable license in favor of the Government.

11 (c) When any person who has made an invention or
12 discovery relating to research on or the production of fission-
13 able material, or the utilization of fissionable materials or
14 atomic energy, and shall have filed an application for a
15 patent thereon and shall have tendered his invention or dis-
16 covery to the Government of the United States for its use,
17 he shall, if and when he ultimately receives a patent, have the
18 right to sue for compensation as provided for in subsections
19 (d) and (e) of section 11 hereof, such right to compensa-
20 tion to begin from the date of any use of the invention by the
21 Government: Provided, That the Commission is authorized
22 to enter into and effect an agreement with said applicant in
23 full settlement and compromise for the use of his invention
24 by the Government.

25 (d) If any person is dissatisfied with the determination

1 of the Commission as to just compensation, he may have his
2 remedy by filing a suit in the United States District Court
3 for the District of Columbia, if filed within six months after
4 such determination; and such court, on notice to the Com-
5 mission and other due procedures had, may thereupon deter-
6 mine the amount of the compensation to be paid such person,
7 as the facts in the case may appear: Provided, That in any
8 such suit the United States may avail itself of any and all
9 defenses, general and special, that might be pleaded by a
10 defendant in an action for infringement, as set forth in title
11 60 of the Revised Statutes, or otherwise. Any final judgment
12 rendered against the Commission under any provision of this
13 section shall have like force and effect as a money judgment
14 rendered against the United States by the Court of Claims
15 in a suit in respect of which the United States has expressly
16 agreed to be sued; and the amount of any such final judgment
17 shall be paid out of any appropriation applicable to the case,
18 if any such there be; and when no such appropriation exists
19 said judgment shall be paid in the same manner as judgments
20 rendered by the Court of Claims in cases under its general
21 jurisdiction.

22 (e) Any party aggrieved by any final judgment in a
23 proceeding under this section may appeal therefrom to the
24 Court of Appeals of the District of Columbia, and upon such
25 appeal said court shall have power to review said judgment

1 and affirm, revoke or modify the same as upon appeals in
2 other actions at law.

3 (f) Attorneys appointed by the Commission may appear
4 for and represent the Commission before any Government
5 agency or judicial tribunal with respect to any and all in-
6 vention, patent and research matters in which the Commission
7 is involved.

8 (g) Any person who has made, or hereafter makes, any
9 invention or discovery utilizing fissionable materials or atomic
10 energy designed or especially adapted for use as or in a
11 military weapon, shall file with the Commission a report
12 containing a complete description thereof. The report cover-
13 ing any such invention or discovery shall be filed on or before
14 whichever of the following is the latest: (1) The sixtieth day
15 after the date of enactment of this Act; (2) the sixtieth day
16 after completion of such invention or discovery; or (3) the
17 sixtieth day after such person first discovers, or first has
18 reason to believe that such invention or discovery is specially
19 useful as or in such a weapon.

20 GENERAL AUTHORITY

21 SEC. 12. (a) In the performance of its functions the
22 Commission is authorized to—

23 (1) establish advisory boards to advise with and
24 make recommendations to the Commission on legisla-
25 tion, policies, administration, research, and other matters;

1 (2) establish by regulation or order such stand-
2 ards and instructions to govern the possession and use
3 of fissionable and byproduct materials as the Commis-
4 sion may deem necessary or desirable to protect health
5 or to minimize danger from explosions and other hazards
6 to life or property;

7 (3) make such studies and investigations, obtain
8 such information, and hold such hearings as the Com-
9 mission may deem necessary or proper to assist it in
10 exercising any authority provided in this Act, or in the
11 administration or enforcement of this Act, or any regu-
12 lations or orders issued thereunder. For such purposes
13 the Commission is authorized to administer oaths and
14 affirmations, and by subpoena to require any person to
15 appear and testify, or to appear and produce documents,
16 or both, at any designated place. No person shall be
17 excused from complying with any requirements under
18 this paragraph because of his privilege against self-
19 incrimination, but the immunity provisions of the Com-
20 pulsory Testimony Act of February 11, 1893 (U. S. C.,
21 title 49, sec. 46), shall apply with respect to any indi-
22 vidual who specifically claims such privilege. Witnesses
23 subpenaed under this subsection shall be paid the same
24 fees and mileage as are paid witnesses in the district
25 courts of the United States;

1 (4) appoint and fix the compensation of such offi-
2 cers and employees as may be necessary to carry out
3 the functions of the Commission. Such officers and
4 employees shall be appointed in accordance with the
5 civil-service laws and their compensation fixed in ac-
6 cordance with the Classification Act of 1923, as
7 amended, except that to the extent the Commission
8 deems such action necessary to the discharge of its
9 responsibilities, personnel may be employed and their
10 compensation fixed without regard to such laws. (38) At-
11 torneys appointed under this paragraph may appear
12 for and represent the Commission in any case in any
13 court. The Commission shall make adequate provision
14 for administrative review of any determination to
15 dismiss any employee;

16 (5) acquire such materials, property, equipment,
17 and facilities, establish or construct such buildings and
18 facilities, and modify such buildings and facilities from
19 time to time as it may deem necessary, and construct,
20 acquire, provide, or arrange for such facilities and serv-
21 ices (at project sites where such facilities and services
22 are not available) for the housing, health, safety, wel-
23 fare, and recreation of personnel employed by the Com-
24 mission as it may deem necessary;

25 (6) with the consent of the agency concerned,

utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this ~~(39)~~ Act;

~~(8)~~ contract for the expenditure of funds for the purposes specified in section 10 ~~(b)~~ without regard to the provisions of section 87 of the Act of January 12, 1895 ~~(28 Stat. 622)~~, and section 11 of the Act of March 1, 1919 ~~(40 Stat. 1270; U. S. C., title 44, sec. 111)~~; and Act; and

~~(40)(9)~~ (8) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) SECURITY.—The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

1 (c) ADVISORY COMMITTEES.—The members of the
2 General Advisory Committee established pursuant to section
3 2 (b) and the members of advisory boards established
4 pursuant to subsection (a) (1) of this section may serve
5 as such without regard to the provisions of sections 109
6 and 113 of the Criminal Code (18 U. S. C., secs. 198 and
7 203) or section 19 (e) of the Contract Settlement Act of
8 1944, except insofar as such sections may prohibit any such
9 member from receiving compensation in respect of any par-
10 ticular matter which directly involves the Commission or
11 in which the Commission is directly interested.

12 COMPENSATION FOR PRIVATE PROPERTY

13 ACQUIRED

14 SEC. 13. (a) The United States shall make just com-
15 pensation for any property or interests therein taken or
16 requisitioned pursuant to sections 5 and 11. The Commis-
17 sion shall determine such compensation. If the compensa-
18 tion so determined is unsatisfactory to the person entitled
19 thereto, such person shall be paid 50 per centum of the
20 amount so determined, and shall be entitled to sue the United
21 States in the Court of Claims or in any district court of the
22 United States in the manner provided by sections 24 (20)
23 and 145 of the Judicial Code to recover such further sum
24 as added to said 50 per centum will make up such amount
25 as will be just compensation.

1 (b) In the exercise of the rights of eminent domain and
 2 condemnation, proceedings may be instituted under the Act
 3 of August 1, 1888 (U. S. C., title 40, sec. 257), or any
 4 other applicable Federal statute. Upon or after the filing of
 5 the condemnation petition, immediate possession may be
 6 taken and the property may be occupied, used, and improved
 7 for the purposes of this Act, notwithstanding any other law.
 8 Real property acquired by purchase, donation, or other means
 9 of transfer may also be occupied, used, and improved for the
 10 purposes of this Act, prior to approval of title by the Attorney
 11 General.

12 (41) JUDICIAL REVIEW AND ADMINISTRATIVE
 13 PROCEDURE

14 SEC. 14. (a) Notwithstanding the provisions of section
 15 12 of the Administrative Procedure Act (Public Law 404,
 16 Seventy-ninth Congress, approved June 11, 1946) which
 17 provide when such Act shall take effect, section 10 of such
 18 Act (relating to judicial review) shall be applicable, upon
 19 the enactment of this Act, to any agency action under the
 20 authority of this Act or by any agency created by or under
 21 the provisions of this Act.

22 (b) Except as provided in subsection (a), no provision
 23 of this Act shall be held to supersede or modify the provisions
 24 of the Administrative Procedure Act.

25 (c) As used in this section the terms "agency action"

1 and "agency" shall have the same meaning as is assigned to
2 such terms in the Administrative Procedure Act.

3 JOINT COMMITTEE ON ATOMIC ENERGY

4 SEC. ~~(42)~~14 15. (a) There is hereby established a Joint
5 Committee on Atomic Energy to be composed of ~~(43)~~ nine
6 eleven Members of the Senate to be appointed by the Presi-
7 dent of the Senate, and ~~(44)~~ nine eleven Members of the
8 House of Representatives to be appointed by the Speaker of
9 the House of Representatives. In each instance not more
10 than ~~(45)~~ five six members shall be members of the same
11 political party.

12 (b) The joint committee shall make continuing studies
13 of the activities of the Atomic Energy Commission and of
14 problems relating to the development, use, and control of
15 atomic energy. The Commission shall keep the joint com-
16 mittee fully and currently informed with respect to the
17 Commission's activities. All bills, resolutions, and other
18 matters in the Senate or the House of Representatives re-
19 lating primarily to the Commission or to the development, use,
20 or control of atomic energy shall be referred to the joint com-
21 mittee. The members of the joint committee who are Mem-
22 bers of the Senate shall from time to time report to the Senate,
23 and the members of the joint committee who are Members
24 of the House of Representatives shall from time to time
25 report to the House, by bill or otherwise, their recommen-

1 dations with respect to matters within the jurisdiction of their
2 respective Houses which are (1) referred to the joint com-
3 mittee or (2) otherwise within the jurisdiction of the joint
4 committee.

5 (c) Vacancies in the membership of the joint commit-
6 tee shall not affect the power of the remaining members to
7 execute the functions of the joint committee, and shall be
8 filled in the same manner as in the case of the original selec-
9 tion. The joint committee shall select a chairman and a vice
10 chairman from among its members.

11 (d) The joint committee, or any duly authorized sub-
12 committee thereof, is authorized to hold such hearings, to
13 sit and act at such places and times, to require, by subpoena
14 or otherwise, the attendance of such witnesses and the
15 production of such books, papers, and documents, to admin-
16 ister such oaths, to take such testimony, to procure such
17 printing and binding, and to make such expenditures as it
18 deems advisable. The cost of stenographic services to report
19 such hearings shall not be in excess of 25 cents per hundred
20 words. The provisions of sections 102 to 104, inclusive, of
21 the Revised Statutes shall apply in case of any failure of any
22 witness to comply with a subpoena or to testify when sum-
23 moned under authority of this section.

24 (e) The joint committee is empowered to appoint and
25 fix the compensation of such experts, consultants, technicians,

1 and clerical and stenographic assistants as it deems necessary
 2 and advisable, but the compensation so fixed shall not exceed
 3 the compensation prescribed under the Classification Act of
 4 1923, as amended, for comparable duties. The committee
 5 is authorized to utilize the services, information, facilities, and
 6 personnel of the departments and establishments of the
 7 Government.

8 ENFORCEMENT

9 SEC. ~~(46)~~¹⁵ 16. (a) Whoever willfully violates, at-
 10 tempts to violate, or conspires to violate, any provision of
 11 sections 4 (b), 4 (e), 5 (a) (3), ~~(47)~~ or ~~6 (b)~~ 6 (b), or
 12 11 (g) shall, upon conviction thereof, be punished by a fine
 13 of not more than \$10,000 or by imprisonment for not more
 14 than five years, or both, except that whoever commits such
 15 an offense with intent to injure the United States or with
 16 intent to secure an advantage to any foreign nation shall,
 17 upon conviction thereof, be punished by ~~(48)~~death, or by
 18 a fine of not more than \$20,000 or by imprisonment for
 19 not ~~(49)~~less than ten years or more than twenty years, or
 20 both.

21 (b) Whoever willfully violates, attempts to violate, or
 22 conspires to violate, any provision of this Act other than
 23 those specified in subsection (a) and other than section 10
 24 ~~(50)(e)~~ (b), ~~(51)~~or of any regulation or order prescribed
 25 or issued under sections 5 ~~(b)~~ (1), 10 (d), or 12 (a) (2),

1 shall, upon conviction thereof, be punished by a fine of not more
2 than \$5,000 or by imprisonment for not more than two years,
3 or both, except that whoever commits such an offense with
4 intent to injure the United States or with intent to secure
5 an advantage to any foreign nation shall, upon conviction
6 thereof, be punished by ~~(52)~~*death, or by* a fine of not more
7 than \$20,000 or by imprisonment for not ~~(53)~~*less than ten*
8 *years or more than twenty years, or both.*

9 (c) Whenever in the judgment of the Commission any
10 person has engaged or is about to engage in any acts or
11 practices which constitute or will constitute a violation of
12 any provision of this Act, or any regulation or order issued
13 thereunder, it may make application to the appropriate court
14 for an order enjoining such acts or practices, or for an order
15 enforcing compliance with such provision, and upon a show-
16 ing by the Commission that such person has engaged or is
17 about to engage in any such acts or practices a permanent
18 or temporary injunction, restraining order, or other order
19 ~~(54)~~*shall may* be granted ~~(55)~~*without bond.*

20 (d) In case of failure or refusal to obey a subpoena
21 served upon any person pursuant to section 12 (a) (3),
22 the district court for any district in which such person is
23 found or resides or transacts business, upon application by
24 the Commission, shall have jurisdiction to issue an order
25 requiring such person to appear and give testimony or to

1 appear and produce documents, or both, in accordance with
 2 the subpoena; and any failure to obey such order of the court
 3 may be punished by such court as a contempt thereof.

4 **(56)(e)** *All persons associated in any capacity, with the*
 5 *development and control of atomic energy, under the Com-*
 6 *mission and all violations of this Act, shall be investigated*
 7 *by the Federal Bureau of Investigation of the Department*
 8 *of Justice.*

9 REPORTS

10 SEC. **(57)**~~46~~ 17. The Commission shall submit to the
 11 Congress, in January and July of each year, a report con-
 12 cerning the activities of the Commission. The Commission
 13 shall include in such report, and shall at such other times as it
 14 deems desirable submit to the Congress, such recommenda-
 15 tions for additional legislation as the Commission deems
 16 necessary or desirable.

17 DEFINITIONS

18 SEC. **(58)**~~47~~ 18. As used in this Act—

19 (a) The term “atomic energy” shall be construed to
 20 mean all forms of energy released in the course of or as
 21 a result of nuclear fission or nuclear transformation.

22 **(59)(b)** *The term “nuclear fission” shall be construed to*
 23 *mean that process which took place in nuclei wherein the*

1 *nucleus is split into fragments, at least two of which contain*
2 *a substantial fraction of the mass of the original nucleus.*

3 ~~(60)(b)~~ (c) The term “Government agency” means any
4 executive department, commission, independent establish-
5 ment, corporation wholly or partly owned by the United
6 States which is an instrumentality of the United States, board,
7 bureau, division, service, office, officer, authority, adminis-
8 tration, or other establishment, in the executive branch of
9 the Government.

10 ~~(61)(e)~~ (d) The term “person” means any individual, cor-
11 poration, partnership, firm, association, trust, estate, public or
12 private institution, group, the United States or any agency
13 thereof, any government other than the United States, any
14 political subdivision of any such government, and any legal
15 successor, representative, agent, or agency of the foregoing,
16 or other entity, but shall not include the Commission or offi-
17 cers or employees of the Commission in the exercise of duly
18 authorized functions.

19 ~~(62)(d)~~ (e) The term “United States”, when used in a geo-
20 graphical sense, includes all Territories and possessions of
21 the United States ~~(63)~~ *and the Canal Zone.*

22 ~~(64)(e)~~ (f) The term “research and development” means
23 theoretical analysis, exploration, and experimentation, and the

1 extension of investigative findings and theories of a scientific
 2 or technical nature into practical application for experimental
 3 and demonstration purposes, including the experimental pro-
 4 duction and testing of models, devices, equipment, materials,
 5 and processes.

6 ~~(65)(f)~~ (g) The term "equipment or device utilizing fission-
 7 able material or atomic energy" shall be construed to mean
 8 any equipment or device capable of making use of fissionable
 9 material or peculiarly adapted for making use of atomic
 10 energy and any important component part especially de-
 11 signed for such equipment or devices, as determined by the
 12 Commission.

13 ~~(66)(g)~~ (h) The term "facilities for the production of fission-
 14 able material" shall be construed to mean any equipment or
 15 device ~~(67)~~*peculiarly adapted for and* capable of such pro-
 16 duction and any important component part especially
 17 designed for such equipment or devices, as determined by the
 18 Commission.

19 APPROPRIATIONS

20 SEC. ~~(68)~~18. ~~(a)~~ 19. There are hereby authorized to
 21 be appropriated such sums as may be necessary and appro-
 22 priate to carry out the provisions and purposes of this Act.

1 The Acts appropriating such sums may appropriate specified
2 portions thereof to be accounted for upon the certification of
3 the Commission only. Funds appropriated to the Commission
4 shall, if obligated by contract during the fiscal year for which
5 appropriated, remain available for expenditure for four years
6 following the expiration of the fiscal year for which appro-
7 priated. After such four-year period, the unexpended bal-
8 ances of appropriations shall be carried to the surplus fund
9 and covered into the Treasury.

10 ~~(69)(b)~~ Such part as the President may determine of
11 the unexpended balances of appropriations, allocations, or
12 other funds available for expenditure in connection with the
13 Manhattan Engineer District are hereby transferred to the
14 Commission and shall be available for expenditure for the
15 purpose of carrying out the provisions of this Act.

16 SEPARABILITY OF PROVISIONS

17 SEC. ~~(70)~~¹⁹ 20. If any provision of this Act, or the
18 application of such provision to any person or circumstances,
19 is held invalid, the remainder of this Act or the application
20 of such provision to persons or circumstances other than
21 those as to which it is held invalid, shall not be affected
22 thereby.

78TH CONGRESS
2D Session

S. 1717

AN ACT

For the development and control of atomic
energy.

IN THE SENATE OF THE UNITED STATES

JULY 22 (legislative day, JULY 5), 1946

Ordered to be printed with the amendments of the
House of Representatives numbered

DIGEST OF
CONGRESSIONAL PROCEEDINGS
OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF BUDGET AND FINANCE
Legislative Reports and Service Section
(For Department staff only)

Issued July 26, 1946
For actions of July 25, 1946
79th-2nd, No. 147

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HIGHLIGHTS: President approved bills to: Extend and amend price-control laws (July 25); establish Swan Island animal-quarantine station; prohibit 1947 cotton and peanut quotas; authorize flood-control projects (July 24). House passed congressional-reorganization bill. House received President's message announcing approval of price-control measure and saying he will recall Congress if it doesn't work. House committee reported O'Mahoney wool bill, RFC continuation, bill to regulate garbage importation, and resolution to continue Smith executive-authority investigation. House received conference reports on bills to clarify rights of former owners of surplus lands, to amend Mineral leasing Act, and on atomic energy. Senate debated railroad-retirement bill and discussed Barkley amendment to exclude certain loading, warehousing, etc. employees. It is understood Senate committee has ordered Flanagan-Hope research-marketing bill reported.

~~HOUSE~~

1. CONGRESSIONAL REORGANIZATION. Passed, 229-61, with amendments the congressional-reorganization bill, S. 2177 (pp. 10089-154). The bill as passed is essentially the same as the committee print submitted by the House Special Committee on the Reorganization of Congress (for major amendments proposed in the committee print see Digest 144).

Agreed to the following amendments:

By Rep. Jensen, Iowa, to include deficiency appropriation bills among those which cannot be considered by the House unless printed hearings and reports have been available for at least three calendar days, by a 86-79 vote (pp. 10130-1).

By Rep. Cannon, Mo., to provide for the staffing of the Appropriations Committees of both Houses in accordance with needs as determined by the Committees, and to make permanent the provision for the investigative system of the House Appropriations Committee (p. 10135).

Rejected the following amendments:

By Rep. Case, S. Dak., to require a two-thirds vote in each house to pass a bill appropriating funds in excess of the Budget after a concurrent resolution has passed adopting the budget and fixing the maximum amount to be appropriated for expenditure in the fiscal year (p. 10128-30).

By Rep. Taber, N.Y., to strike out Sec. 138, which would provide that the revenue and appropriations committees shall make an over-all estimate of receipts and expenditures, including a reserve for deficiencies, and shall report a concurrent resolution (1) to provide for reduction of the public debt if receipts are estimated to exceed expenditures or (2) to express it as the sense of

Congress that the public debt be increased by the amount that estimated expenditures may exceed estimated receipts, by a 27-101 vote (p. 10125-30).

By Rep. Case, S.Dak., to prohibit the consideration of appropriation bills until a resolution described in the amendment proposed by Rep. Taber above has been adopted (p. 10130).

By Rep. Jones, Ohio, to prohibit any amendment in either House to an appropriation bill proposing an increase in such a bill which would result in an increase in the over-all amount which may be appropriated for any executive department or agency, and to prohibit the consideration of any appropriation in any appropriation bill which exceeds the Budget Bureau's estimates by a certain percentage ratio (p. 10130).

By Rep. Herter, Mass., to permit members of Congress to appear before committees at a certain period each month and explain bills they have introduced (p. 10154). This amendment had been agreed to in the Committee of the Whole earlier in the day (p. 10122).

By Rep. Rizley, Okla., to strike out the provision for retirement benefits for Members of Congress (pp. 10150-4).

2. WOOL MARKETING. The Agriculture Committee reported with amendment H.R. 6043, to amend the Agricultural Marketing Agreement Act so as to include wool as a commodity to which orders under such act are applicable and to authorize the Secretary of Agriculture to fix wool standards and conduct wool research, and to authorize the CCC to provide price support for wool (H. Rept. 2666) (p. 10168).
3. WATER POLLUTION; HEALTH. The Agriculture Committee reported without amendment H.R. 7101, to prohibit, for the purpose of protecting American agriculture, horticulture, livestock, and the public health, the throwing or depositing of garbage from any vessel, railway car, aircraft, or other vehicle into any territorial U.S. waters or onto any land within the U.S.; to require this Department to license (with authority to revoke the authorization) garbage collectors to collect garbage from vessels, railway cars, etc., and to so proclaim if any type or kind of fruit, vegetable, or animal product, purchased as ships' provisions at Canadian ports, is likely to be a source of contagious diseases; to designate employees of this Department, and any customs, immigration, or public health officer as authorized representatives of the U.S. for the enforcement of the prohibitions; and to authorize the Secretary to prescribe rules and regulations, for administrative purposes only, in carrying out the provisions of the bill (H. Rept. 2665) (p. 10168).
4. R.F.C. The Banking and Currency Committee reported with amendments S.J. Res. 156, to extend the succession, lending powers, and the functions of the RFC (H. Rept. 2667) (p. 10168).
5. RESEARCH; ATOMIC ENERGY. Received the conference report on S. 1717, for the control and development of atomic energy (p. 10154-8).
Received from the President a supplemental appropriation estimate of \$750,000 for the Atomic Energy Commission (H. Doc. 722). To Appropriations Committee. (p. 10167.)
Rep. Durham, N.C., was appointed a conferee on S. 1717, the atomic-energy bill, in the place of Rep. Brooks, La. (p. 10071).
6. MINERALS. Received the conference report on S. 1236, to promote the development of oil and gas on the public domain (pp. 10159-60).
7. SURPLUS PROPERTY. Received the conference report on H.R. 6702, to clarify the rights of former owners of real property to reacquire such property under the Surplus Property Act (p. 10158).

mony in favor of optional retirement for Members of Congress was vigorously advocated by former Senator, now Justice Burton, of Ohio, Senator White, the minority leader of the Senate of the United States, Senator Bridges, of New Hampshire, Beardsley Ruml, and many other business and professional leaders of the country, who realize that what has been beneficial in commerce and industry will be beneficial to the procedures and services of the Members of the Congress of the United States.

Senator BRIDGES stated:

I think just as other Government officials have the benefit of retirement provisions, that we of the Congress should have them.

Dr. Mayer Jacobstein, staff member, Brookings Institution, said:

A retirement plan plus a more liberal salary would go far toward giving Representatives and Senators that feeling of financial security which they deserve.

The then Senator Burton had this to say:

I think it is a good thing to have a pension for all kinds of Government service, but upon the basis of a contribution.

Mr. Ruml indicated that unlike most activities in life, being a Member of Congress does not lead to something else. There is no other Congress that you can get a job in for example. There is no way you can be promoted to chairman of the board of directors. I mean it has a peculiarly hazardous nature; it is a hazardous occupation from that point of view unlike a university president or professional man, or some one who is building from his experience, if it is meritorious, a future for himself.

I direct your attention to the words of Senator WHITE:

I personally have been very strongly in favor of a retirement system, a retirement system to which the beneficiary must make his contribution. I think a retirement system would make a contribution to independence of thought and independence of action, to a courageous attitude on the part of the Representative toward problems which are constantly confronting him.

Dean W. Reed West, of George Washington University had the following to say:

Retirement pay for Members based on age and long service would be a means of overcoming this almost inevitable tendency of individuals to weaken in their independence of the Executive.

The CHAIRMAN. The chair recognizes the gentlewoman from Illinois [Miss SUMNER].

Miss SUMNER of Illinois. Mr. Chairman, there will be headlines in every newspaper tomorrow morning saying that the Congress worked overtime voting itself a pension. How are the people going to like that? They are not going to mind the fact that you handed yourselves \$15,000 for 6 months' work. They will believe that perhaps they will be able to get good men to come here to represent them; but when they find out that you have voted yourself a pension so that after they fire you they have to go on paying you separate maintenance, it will be just too much.

The CHAIRMAN. The Chair recognizes the gentleman from Mississippi [Mr. WHITTEN].

Mr. WHITTEN. Mr. Chairman, I supported the Buck amendment believing adequate pay is now provided for the Congress. True we must live within our income. Who does not? After all, work, hard work, if you please, of the individual American citizen, who lived within his means, set aside for his insurance and to take care of his own security is what has made America great. Today when we complain rightly, that everyone seems to be looking to the Federal Government for grants, for allocations, when we hear on this floor the complaints about the States wanting Federal grants at a time when the various States are in a much better financial condition than the Federal Government, certainly it will be a mistake to provide a pension for Members of Congress. Of course, you argue that the Member pays into such fund just as he would for an insurance annuity. Why not take the same money and buy such insurance annuity then?

If Members of Congress are not stable enough, if they do not have foresight enough to live within their own means and provide for their own security, who can the Congress expect to work, and provide for their own welfare?

Mr. Chairman, by all means this amendment should be adopted, and provisions of this bill providing for a pension, stricken out of the bill. If the bill is passed without this amendment what defense will this Congress have to the millions who came asking security at the hands of the Government without effort on their part. You will have opened the gates and instead of preaching individual enterprise, with individual attention to a man's own security, you say to everyone, "Look to the Government." The old, the incapacitated have a right to look for assistance. You invite all others to quit trying and to look to the Government. You say to them there is no need for you to be saving, there is no need to live within your means, there is no need for you to work, the Federal Government will look after you. There is too much of that attitude already. After all the Government is the people, and if all quit work and look to the Government, there will be no one to pay taxes and the promise of the Government will not be worth the paper it is written on.

This House should adopt this amendment, and strike out the pension features of this bill. Keep this Congress where it can say "No" to those who want the Government to provide everything. Keep a sound Government, and a sound Congress, an independent Congress if you please.

The CHAIRMAN. The Chair recognizes the gentleman from Idaho [Mr. WHITE].

Mr. WHITE. Mr. Chairman, there are a great many influences that flow around the individual Members of Congress—influence of departments and from other sources that we all know about. If there is one thing that the individual Congressman needs more than anything else, and that the people of the United States need, is those who represent them in Congress, it is stamina.

We pension our judges to keep them from temptation. Why should we not give security to Congressmen so that

they might have a little independence to stand up and protect the interest of the American people; in considering and passing legislation?

The CHAIRMAN. The Chair recognizes the gentleman from Mississippi [Mr. ABERNETHY].

Mr. ABERNETHY. Mr. Chairman, I favor the amendment offered by the gentleman from Oklahoma [Mr. RIZLEY]. It is difficult to understand how Members of this body, men and women who have established themselves as successful in one field or another else they would not be honored as they are today, can vote a pension for Congressmen. Certainly, Congress could not pass fair judgment on similar calls if the law provides such pensions for its Members, even though the Member does pay toward such pension funds.

The principal object of this bill is to streamline the Congress. It is intended to eliminate bottlenecks, to promote efficiency, to speed up the business of the Congress that we might do a better job for our constituency and the country. What place or what part does a congressional pension feature play in such worthy objectives? It would contribute not one iota to the good causes for which this bill is intended.

The pension feature should be considered on its own merits. The same applies to salary increases for Members, which I opposed by voting for the amendment offered by the gentleman from New York [Mr. BUCK].

I shall vote for the pending amendment. If it should not prevail, I shall vote against the bill, on which I hope we will have a roll-call vote.

(Mr. ABERNETHY asked and was given permission to extend his remarks in the RECORD.)

The CHAIRMAN. The Chair recognizes the gentleman from Mississippi [Mr. WINSTEAD].

Mr. WINSTEAD. Mr. Chairman, I am opposed to this so-called pension for Congressmen and therefore for this amendment for many reasons. Many sound reasons have been offered by other Members here this afternoon. I also supported the Buck amendment to prevent the increase in salary for Congressmen.

It would be a mistake to provide for a congressional pension even though, as has been argued, payments are taken from the salaries of the Members just as they are from the salaries of the rural carriers, postmasters, and other Federal workers. Different from them, the Congress must sit as judges, we must pass on the requests of others and by bringing the Members of Congress into such a program, you almost make them interested parties. The aged and the infirm have a right to look to society to assist them, but I still believe that an able-bodied American citizen should look after himself, and provide for his own security. The retirement provisions of the Civil Service Act whereby the worker builds up the funds for his own retirement I believe are sound. But, Mr. Speaker, we are the judges, and I believe by providing for congressional pensions that the Nation will be weakened and the American people will be further led along the road

of not working, but looking to the Federal Government for everything.

I hope this amendment will be adopted and the pension provisions stricken out of the bill.

(Mr. WINSTEAD asked and was given permission to revise and extend his remarks.)

The CHAIRMAN. The Chair recognizes the gentleman from Texas [Mr. RAYBURN].

Mr. RAYBURN. Mr. Chairman, I do not care to indulge in debate on this amendment offered by the gentleman from Oklahoma. I take the floor at this time to express the hope that when we get into the House the so-called Herter amendment will be defeated. That amendment says each standing committee of the Senate and of the House shall set aside time each month. I fear that if 20 out of the 435 Members in the House saw a bill in the committee far down the line ahead of them they might introduce 20 bills and take up the time of the committee. I have faith and confidence in the chairmen of committees. Some of them may be a little autocratic, of course, but most of them respond to Members of Congress when they ask to be heard on a bill that is introduced by them. I can see implications in this that I think may be very harmful. I know that the gentleman from Massachusetts does not have that in mind, but having served many years on committees and 6 years as chairman of one committee, I do not think that amendment is necessary.

The CHAIRMAN. The time of the gentleman from Texas has expired. All time has expired.

The question is on the amendment offered by the gentleman from Oklahoma [Mr. RIZLEY].

The question was taken; and on a division (demanded by Mr. RIZLEY) there were—ayes 63, noes 166.

So the amendment was rejected.

The CHAIRMAN. The question is on the committee substitute to the Senate bill.

The committee substitute was agreed to.

The CHAIRMAN. Under the rule, the Committee rises.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr. SMITH of Virginia, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee having had under consideration the bill (S. 2177) to provide for increased efficiency in the legislative branch of the Government, pursuant to House Resolution 717, he reported the bill back to the House with an amendment adopted by the Committee of the Whole.

The SPEAKER. Under the rule, the previous question is ordered.

Is a separate vote demanded on any amendment to the committee amendment?

Mr. MONRONEY. Mr. Speaker, I demand a separate vote on the so-called Herter amendment.

The SPEAKER. The Clerk will report the amendment on which a separate vote has been demanded.

The Clerk read as follows:

Amendment offered by Mr. HERTER: Page 49, after line 4, insert a new subsection to read as follows:

"(g) Each standing committee of the Senate and the House of Representatives shall set aside a regular period during each month to afford opportunity to Members who have introduced any bill or resolution to appear before the committee to explain the measure and outline the nature and character of the considerations which in their judgment support its passage."

The amendment was rejected.

The SPEAKER. The question is on the committee substitute for the Senate bill.

The committee substitute was agreed to.

The SPEAKER. The question is on the third reading of the bill.

The bill was ordered to be read a third time, and was read the third time.

Mr. MURRAY of Tennessee. Mr. Speaker—

The SPEAKER. For what purpose does the gentleman from Tennessee rise?

Mr. MURRAY of Tennessee. Mr. Speaker, I offer a motion to recommit.

The SPEAKER. Does any member of the minority claim the right to offer a motion to recommit?

Mr. KNUTSON. Mr. Speaker, I offer a motion to recommit.

The SPEAKER. Is the gentleman opposed to the bill?

Mr. KNUTSON. In its present form, Mr. Speaker.

The SPEAKER. The Clerk will report the motion to recommit.

The Clerk read as follows:

Mr. KNUTSON moves that the bill be recommitted.

Mr. MONRONEY. 'Mr. Speaker, I move the previous question on the motion to recommit.

The previous question was ordered.

The SPEAKER. The question is on the motion to recommit.

The motion to recommit was rejected.

The SPEAKER. The question is on the passage of the bill.

The question was taken; and on a division (demanded by Mr. MURRAY of Tennessee) there were—ayes 229, noes 61.

Mr. MURRAY of Tennessee, Mr. ABERNETHY, and Mr. LECOMPTE demanded the yeas and nays.

The yeas and nays were refused.

So the bill was passed.

A motion to reconsider was laid on the table.

Mr. MONRONEY. Mr. Speaker, I ask unanimous consent that the Clerk of the House be authorized and directed in the engrossing of the amendment to the bill (S. 2177) to provide for increased efficiency in the legislative branch of the Government, to make all necessary clerical and technical changes, including changes in section numbers and cross references, and changes in the table of contents.

The SPEAKER. Without objection, it is so ordered.

There was no objection.

ATOMIC ENERGY BILL

Mr. THOMASON. Mr. Speaker, I ask unanimous consent that the conferees on

the atomic energy bill S. 1717, have until midnight tonight to file a conference report.

The SPEAKER. Without objection, it is so ordered.

There was no objection.

The conference report and statement are as follows:

CONFERENCE REPORT

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 1717) for the development and control of atomic energy, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its amendments numbered 1, 19, 25, 28, 30, 32, 34, 37, 43, 44, 45, 47, 49, 52, 53, 56, 59, 60, 61, 62, 64, 65, 66, and 67.

That the Senate recede from its disagreement to the amendments of the House numbered 2, 4, 5, 6, 7, 8, 9, 11, 12, 15, 16, 17, 18, 21, 22, 23, 26, 27, 36, 38, 39, 40, 41, 42, 46, 50, 54, 55, 57, 58, 63, 68, 69, 70, and 71, and agree to the same.

Amendment numbered 3: That the Senate recede from its disagreement to the amendment of the House numbered 3, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following:

"(d) Appointment of Army and Navy Officers.—Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 edition, title 10, sec. 576), section 212 of the Act entitled 'An act making appropriations for the Legislative Branch of the Government for the fiscal year ending June 30, 1933, and for other purposes', approved June 30, 1932, as amended (U. S. C., 1940 edition, title 5, sec. 59a), section 2 of the Act entitled 'An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-five, and for other purposes', approved July 31, 1894, as amended (U. S. C., 1940 edition, title 5, sec. 62), or any other law, any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to his commissioned status as such officer. Any such officer serving as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in subsection (a) (4) (B) of this section."

And the House agree to the same.

Amendment numbered 10: That the Senate recede from its disagreement to the amendment of the House numbered 10, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "subject to valid claims, rights, or privileges existing on the date of the enactment of this Act"; and the House agree to the same.

Amendment numbered 13: That the Senate recede from its disagreement to the amendment of the House numbered 13, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "if such individual, corporation, partnership, or association, by reason of having had such part in the development of the atomic bomb project, acquired confidential official information as to the existence of deposits of such uranium, thorium, or other materials in the specific lands upon which such location, entry, or settlement is made, and subsequent

to the date of the enactment of this Act made such location, entry, or settlement or caused the same to be made for his, its, or their benefit"; and the House agreed to the same.

Amendment numbered 14: That the Senate recede from its disagreement to the amendment of the House numbered 14, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following:

"The Commission shall not—

"(1) Distribute any fissionable material to (A) any person for a use which is not under or within the jurisdiction of the United States, (B) any foreign government, or (C) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.

"(2) License any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security."

And the House agree to the same.

Amendment numbered 20: That the Senate recede from its disagreement to the amendment of the House numbered 20, and agree to the same with an amendment as follows: In lieu of the House amendment strike out in the Senate engrossed bill on page 25, line 12, the following: "not to exceed one year,"; and the House agree to the same.

Amendment numbered 24: That the Senate recede from its disagreement to the amendment of the House numbered 24, and agree to the same with an amendment as follows: In lieu of the matter proposed to be stricken out by the House amendment insert the following:

"(1) That until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established, there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes; and"

And the House agree to the same.

Amendment numbered 29: That the Senate recede from its disagreement to the amendment of the House numbered 29, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 31: That the Senate recede from its disagreement to the amendment of the House numbered 31, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 33: That the Senate recede from its disagreement to the amendment of the House numbered 33, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for

life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 35: That the Senate recede from its disagreement to the amendment of the House numbered 35, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following:

"(5) (A) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States."

"(B) (i) No arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person with whom such arrangement is made, the contractor or prospective contractor, or the prospective licensee agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security.

"(ii) Except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual.

"(iii) Notwithstanding the provisions of subparagraphs (i) and (ii), during such period of time after the enactment of this Act as may be necessary to make the investigation, report, and determination required by such paragraphs, (a) any individual who was permitted access to restricted data by the Manhattan Engineer District may be permitted access to restricted data and (b) the Commission may employ any individual who was employed by the Manhattan Engineer District.

"(iv) To protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the services of any Government agency to the extent he may deem necessary or desirable.

"(C) All violations of this Act shall be investigated by the Federal Bureau of Investigation of the Department of Justice."

And the House agree to the same.

Amendment numbered 48: That the Senate recede from its disagreement to the amendment of the House numbered 48, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 51: That the Senate recede from its disagreement to the amendment of the House numbered 51, and agree to the same with an amendment as follows: In lieu of the matter proposed to be stricken out by the House amendment insert the following: ", or of any regulation or order prescribed or issued under sections 5 (b) (4),

10 (c), or 12 (a) (2),"; and the House agree to the same.

A. J. MAY,
R. EWING THOMASON,
CARL T. DURHAM,
CHARLES R. CLASON,

Managers on the Part of the House.

BRIEN MCMAHON,
ED C. JOHNSON,
RICHARD RUSSELL,
ARTHUR VANDENBERG,
E. D. MILLIKIN,

Managers on the Part of the Senate.

STATEMENT

The managers on the part of the House at the conference on the disagreeing votes of the two houses on the amendments of the House to the bill (S. 1717) for the development and control of atomic energy, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommended in the accompanying conference report:

Amendment No. 1: The House amendment required at least one member of the Atomic Energy Commission to be a member of the armed forces. The House recedes.

Amendment No. 2: The House amendment requires that the Director of the Division of Military Application be a member of the armed forces. The Senate recedes.

Amendment No. 3: This amendment would permit not to exceed two active or retired officers of the Army or Navy to serve at any one time as members of the Commission, and one such officer to serve as the Director of the Division of Military Application, without prejudice to their status as such officers. The Senate recedes with an amendment which limits the application of this provision to the officer serving as Director of the Division of Military Application.

Amendment No. 4: The Senate bill authorized and directed the Commission to make arrangements (including contracts, agreements, grants-in-aid, and loans) for the conduct of research and development activities. This amendment strikes out the words "grants-in-aid." The Senate recedes.

Amendment No. 5: The bill as it passed the Senate provided that the Commission shall be the exclusive owner of certain facilities for the production of fissionable material. This amendment inserts after the word "Commission" the words "as agent of and on behalf of the United States." The Senate recedes.

Amendment No. 6: This amendment would permit the Commission to authorize its contractors to enter into subcontracts. The Senate recedes.

Amendment No. 7: Under this amendment it is made clear that persons lawfully producing or utilizing fissionable material may expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material. The Senate recedes.

Amendment No. 8: This amendment makes it clear that the authority of the Commission to distribute fissionable material relates to material owned by it. The Senate recedes.

Amendment No. 9: This amendment makes it clear that licenses are required for the exportation of source material from the United States. The Senate recedes.

Amendment No. 10: This amendment struck out the Senate language which excepted existing or inchoate rights and privileges from the reservation for the use of the United States of source materials in deposits in the public lands, and substituted a provision that such reservation should be subject to valid claims existing on the date of the enactment of the act. The Senate recedes with an amendment which modifies the House provision so as to provide that

the reservation for the use of the United States shall be subject to valid claims, rights, or privileges existing on the date of enactment of the act.

Amendments Nos. 11 and 12: These are technical amendments substituting the word "individual" for the word "person", and the Senate recedes.

Amendment No. 13: The Senate bill provided that no person, corporation, partnership, or association which had any part in the development of the atomic-bomb project may benefit by any location, entry, or settlement upon the public domain made after having taken such part in such project. This amendment of the House modified this prohibition so as to make it inapplicable if the benefit was authorized by the Commission. The Senate recedes with an amendment which provides that the prohibition will apply only in cases where, by reason of having taken part in the atomic-bomb project, confidential official information was acquired as to the existence of deposits of source materials in the specific lands upon which the location, entry, or settlement is made, and only in cases where the location, entry, or settlement is made subsequent to the date of the enactment of this act.

Amendment No. 14: This amendment has three purposes. First, to prohibit the Commission from distributing any fissionable material to any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security. Second, to clarify the Commission's authority with respect to source material. Third, to prohibit the Commission from licensing any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security. The Senate recedes with an amendment to correct the numbering and lettering of the subsection.

Amendment No. 15: This amendment strikes out provisions requiring the Commission to establish by regulation a procedure by which any person who is dissatisfied with the distribution or refusal to distribute to him, or the recall from him, of any fissionable or byproduct materials or with the issuance, refusal, or revocation of a license to him for the transfer or receipt of source materials may obtain a review of such determination by a board of appeal consisting of three members appointed by the Commission. The Senate recedes.

Amendment No. 16: This is a clerical amendment. The Senate recedes.

Amendment No. 17: Under this amendment the President from time to time may direct the Commission to deliver such quantities of fissionable materials to the armed forces for such use as he deems necessary in the interest of national defense. The Senate recedes.

Amendment No. 18: Under this amendment the President from time to time may direct the Commission to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon. The Senate recedes.

Amendment No. 19: This amendment excepted activities authorized by the Commission under section 6 (a) from the prohibition contained in section 6 (b) against manufacturing, producing, transferring, or acquiring equipment or devices utilizing fissionable material or atomic energy as a military weapon. Since the Senate bill already excepts from this prohibition all activities authorized by the Commission, this amendment merely duplicated in part the exception in the Senate bill and, consequently, is unnecessary. The House recedes.

Amendment No. 20: This amendment, as agreed to in conference, provides that licenses authorizing certain activities with respect to fissionable material or atomic energy shall be issued for a specified period, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon expiration of such period. The bill as it passed the Senate provided that licenses could not be issued for a period to exceed 1 year. The House amendment provided that such licenses could not be issued for a period of less than 1 year.

Amendment No. 21: This is a clerical amendment. The Senate recedes.

Amendment No. 22: This amendment provides that no license relating to the utilization of atomic energy may be given to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to common defense and security. The Senate recedes.

Amendment No. 23: This amendment makes clear that the definition of "international arrangement" includes only an international agreement approved by the Congress after the Atomic Energy Act of 1946 becomes law. The Senate recedes.

Amendment No. 24: This amendment, as agreed to in conference, is a statement of principle to be followed by the Commission that until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes. The House amendment proposed to strike out the statement of principle in the bill as it passed the Senate that such information should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that such safeguards have been established.

Amendment No. 25: This amendment relates to the numbering of a paragraph, and the House recedes.

Amendment No. 26: This amendment struck out the provision of the Senate bill which specifically authorized and directed the Commission to establish information services, publications, libraries, and other registers of information. The Senate recedes.

Amendment No. 27: This amendment relates to the lettering of a subsection. The Senate recedes.

Amendment No. 28: This amendment would have required a unanimous vote of the Commission for it to determine that any data could be published without adversely affecting the common defense and security. The House recedes.

Amendments Nos. 29, 30, 31, 32, 33, 34, 48, and 49: These amendments provided that the death penalty might be imposed upon persons convicted of violating certain provisions of the act, with intent to injure the United States or with intent to secure an advantage to any foreign nation, and provided that the minimum term of imprisonment for persons convicted of such violations should be 10 years. The conference agreement provides that the penalty of death or imprisonment for life may be imposed, but only upon the recommendation of the jury and only in the case of offenses committed with intent to injure the United States. The provisions for minimum terms of imprisonment of 10 years are eliminated.

Amendment No. 35: The bill as it passed the Senate provided that no person shall be prosecuted for any violation of the provisions relating to restricted data unless and until the Attorney General has advised and consulted with the Commission with respect to such prosecution.

The House amendment struck out the Senate provision and provided that the Com-

mission shall make no contract under sections 3 or 4, issue no license to any person, nor employ any person until the Federal Bureau of Investigation shall have first made an investigation of the character and associations of such person and certified that the character of such contractor, licensee, or employee is such as not to endanger the common defense or security.

The Senate recedes with an amendment which provides that (1) no person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States; (2) no arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person dealing with the Commission agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security; (3) except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual; (4) during such period of time after the enactment of this act as may be necessary to make such investigation, report, and determination, individuals who were permitted access to restricted data by the Manhattan Engineer District may be permitted access to restricted data and the Commission may employ individuals who were employed by the Manhattan Engineer District; (5) to protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the services of any Government agency to the extent he may deem necessary or desirable, and (6) all violations of this act shall be investigated by the Federal Bureau of Investigation of the Department of Justice.

Amendment No. 36: This is a clerical amendment and the Senate recedes.

Amendment No. 37: The Senate bill provided that no patent should be granted after the date of enactment of the act for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon and provided for the revocation of any patent previously issued for any such invention or discovery and payment of just compensation to the owner of the patent. The Senate bill further provided (1) that no patent granted after the date of enactment of the act should confer any rights with respect to any invention or discovery to the extent that it is used in the production of fissionable material, the utilization of fissionable material or atomic energy for a military weapon, or the conduct of research or development activities in the atomic energy field; and (2) that any rights conferred by any patent previously issued should be revoked to the extent that the invention or discovery should be so used and that just compensation should be made for the revocation of rights. The House amendment contained no provisions comparable to the above-described provisions of the Senate bill.

The Senate bill provided that any person who has made or may make an invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military

weapon should make a report to the Commission within a limited period of time describing such invention or discovery, unless it is described in an application for patent filed in the Patent Office within such period of time. The House amendment contained a similar provision requiring reports to the Commission with respect to inventions and discoveries, but such provision was applicable only to inventions or discoveries "utilizing fissionable materials or atomic energy designed or especially adapted for use as or in a military weapon."

The Senate bill placed a duty on the Commission to declare any patent to be affected with the public interest if (1) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy, and (2) the use of such invention or discovery by persons having licenses for the utilization of atomic energy is necessary to effectuate the policies and purposes of the act. In any case in which a patent should be declared to be affected with the public interest the Commission would be licensed to use the invention or discovery and persons having licenses from the Commission for the utilization of atomic energy would be licensed to use it to the extent necessary in carrying on their activities licensed by the Commission. The owner of the patent would be entitled to a reasonable royalty fee for the use of the invention or discovery, the fee to be agreed upon by the owner and the licensee or to be fixed by the Commission in the absence of an agreement. The Senate bill contained appropriate provisions preventing court proceedings to stay, restrain, or enjoin the use of inventions or discoveries licensed under the provisions of the bill and to provide for the collection through court proceedings of royalty fees for the use of inventions or discoveries so licensed. The House amendment contained no provisions comparable to those described in this paragraph.

The Senate bill authorized the Commission to purchase, or to take, requisition, or condemn, and make just compensation for (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or patent application covering any such invention or discovery. The bill required the Commissioner of Patents to notify the Commission of, and to provide it access to, all applications for patents which in his opinion disclose such inventions or discoveries. The House amendment authorized the Commission to purchase, for the manufacture or use by or for the United States Government, any and all rights in and to any invention or discovery, or application for patent or patent thereon, relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy. The House amendment authorized the Commission to condemn any or all rights to any such invention or discovery which affects the national defense and security, but provided that whenever the Commission determined that the national defense or security were no longer involved any and all rights in such invention or discovery would revert to the owner, subject to a nonexclusive, irrevocable, and nontransferable license in favor of the Government.

The House amendment provided that any person making an invention or discovery relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy should, upon filing an application for a patent thereon and tendering the invention or discovery to the United States for its use, have the right to sue the United States for compensation for the use of such invention or discovery in the event he should ultimately receive a patent thereon. The Commission

was authorized to make an agreement with the inventor in settlement for the use of his invention by the Government. The Senate bill contained no comparable provisions to those described in this paragraph.

The Senate bill provided for the designation by the Commission of a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications filed with the Commission for (1) the determination of reasonable royalty fees in connection with patents declared to be affected with the public interest and licensed for use by persons having atomic energy utilization licenses from the Commission, (2) the payment of just compensation for patents and patent rights revoked under the Senate bill, and (3) the grant of awards by the Commission to persons making inventions or discoveries useful solely, or among other purposes, for the production of fissionable material or the utilization of fissionable material or atomic energy for a military weapon. The bill provided that in fixing royalty fees the Commission should take into consideration any defense, general or special, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, the patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and might take into consideration the cost to the owner of the patent of developing the invention or discovery or acquiring the patent. The bill provided that the Commission, in connection with applications for just compensation and awards, should take into account the same factors considered by it in fixing royalty fees, and also the actual use of the invention or discovery. The Senate bill provided that any person aggrieved by a Commission determination upon an application for an award or the fixing of a reasonable royalty fee might obtain a review thereof in the Court of Appeals for the District of Columbia. The House amendment contained no provisions with respect to the fixing of royalty fees or the payment of awards to inventors.

The House amendment provided that persons dissatisfied with Commission determinations as to just compensation for inventions or discoveries condemned, or tendered to and used, by the Commission should have the right to maintain suit in the United States District Court for the District of Columbia for the purpose of determining the just compensation to be paid. The amendment further provided for an appeal to the Court of Appeals of the District of Columbia from the decision of the district court. The section of the Senate bill relating to patents contained no specific provisions with respect to judicial determination of just compensation for patents and patent rights revoked by the section or taken, requisitioned, or condemned by the Commission. Section 11 of the Senate bill provided, however, for suit in the Court of Claims in the event the person entitled to just compensation should be dissatisfied with the determination of the Commission.

The House recedes on this amendment.

Amendment No. 38: This amendment struck out the provision authorizing attorneys appointed by the Commission to appear for and represent the Commission in any case in any court. The Senate recedes.

Amendment No. 39: This amendment struck out the provisions which waived certain general restrictions of law in the expenditure of funds for the purposes specified in section 10 (b). Since amendment No. 26 struck out section 10 (b), this provision is no longer appropriate. The Senate recedes.

Amendment No. 40: This is a clerical amendment and the Senate recedes.

Amendment No. 41: This amendment provides that section 10 of the Administrative Procedure Act should be applicable with respect to agency actions of the Commission immediately upon the enactment of this act

and provided that this act should not be held to supersede or modify the Administrative Procedure Act. The Senate recedes.

Amendment No. 42: This is a clerical amendment and the Senate recedes.

Amendments Nos. 43, 44, and 45: These amendments increased from 9 to 11 the number of Members from each House who would be members of the Joint Committee on Atomic Energy, and increased from 5 to 6 the number of Members from each House who might be members of the same political party. The House recedes.

Amendment No. 46: This is a clerical amendment, and the Senate recedes.

Amendment No. 47: This amendment made the heavier criminal penalties provided in subsection (a) of the enforcement section, rather than the lighter penalties under subsection (b), applicable in the case of violations of the act arising out of the failure to report certain inventions and discoveries to the Commission. The House recedes.

Amendment No. 50: This is a clerical amendment, and the Senate recedes.

Amendment No. 51: This amendment eliminated from the bill the provisions which would have provided criminal penalties for violations of regulations or orders issued under specified sections of the act. The Senate recedes with an amendment which restores the provision with a clerical change correcting a cross reference.

Amendments Nos. 52 and 53: These amendments, like some of those referred to above, provided that the death penalty might be imposed upon persons convicted of violating certain provisions of the act, with the intent to injure the United States or to secure an advantage to any foreign nation, and provided that the minimum term of imprisonment for persons convicted of such violations should be 10 years. As the offenses to which these amendments were applicable are likely to be of a less serious nature than the other offenses to which the heavy penalties were made applicable, these penalties were deemed to be excessive in these cases and the House recedes.

Amendments Nos. 54 and 55: These amendments modified the provision relating to enjoining violations of the act or regulations or orders thereunder, so that instead of providing, as did the Senate bill, that upon a showing by the Commission that a person has engaged or is about to engage in such a violation an injunction, restraining order, or other order shall be granted without bond, it will provide that upon such a showing an injunction, restraining order, or other order may be granted. The Senate recedes.

Amendment No. 56: This amendment provided that all persons associated in any capacity with the control and development of atomic energy under the Commission, and all violations of this Act, should be investigated by the Federal Bureau of Investigation. As the subject matter of this amendment is dealt with in connection with amendment No. 35, the House recedes on this amendment.

Amendments Nos. 57 and 58: These are clerical amendments, and the Senate recedes.

Amendment No. 59: The amendment inserted a definition of the term "nuclear fission". The House recedes.

Amendments Nos. 60, 61, and 62: These are clerical amendments, and the House recedes.

Amendment No. 63: This is a technical amendment, and the Senate recedes.

Amendments Nos. 64, 65, and 66: These are clerical amendments and the House recedes.

Amendment No. 67: The bill as it passed the Senate defined the term "facilities for the production of fissionable material" so as to include any equipment or device capable of such production. This amendment limited the term to any equipment or device

peculiarly adopted for and capable of such production. The House recedes.

Amendment No. 68: This is a clerical amendment and the Senate recedes.

Amendment No. 69: This amendment struck out a provision transferring funds available for expenditure in connection with the Manhattan Engineer District to the Commission for expenditure for the purpose of carrying out the provisions of the Act. The Senate recedes.

Amendments Nos. 70 and 71: These are clerical amendments, and the Senate recedes.

A. J. MAY,

R. EWING THOMASON,

CARL T. DURHAM,

CHARLES R. CLASON.

Managers on the Part of the House.

SURPLUS PROPERTY

Mr. MANASCO submitted the following conference report and statement on the bill (H. R. 6702) to clarify the rights of former owners of real property to reacquire such property under the Surplus Property Act of 1944:

CONFERENCE REPORT

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H. R. 6702) to clarify the rights of former owners of real property to reacquire such property under the Surplus Property Act of 1944, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate and agree to the same.

CARTER MANASCO,

WILL M. WHITTINGTON,

CLARE E. HOFFMAN,

GEORGE H. BENDER,

Managers on the Part of the House.

JAMES E. MURRAY,

BURNET R. MAYBANK,

CHAPMAN REVERCOMB,

GEO. A. WILSON,

Managers on the Part of the Senate.

STATEMENT

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H. R. 6702) to clarify the rights of former owners of real property to reacquire such property under the Surplus Property Act of 1944, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommend in the accompanying conference report:

Section 1 of the House bill modifies the definition of the term "real property" contained in section 23 (a) (1) of the Surplus Property Act of 1944 by including in the definition hotels, apartment houses, office buildings, stores, and other commercial structures. Section 1 of the conference report likewise includes commercial structures in the definition of the term "real property" but excludes (1) commercial structures constructed by, at the direction of, or on behalf of any Government agency, and (2) commercial structures which the War Assets Administrator determines have been made an integral part of a functional or economic unit which should be disposed of as a whole. Former owners thus have the privilege to reacquire commercial structures where such structures are being disposed of by War Assets Administration substantially in their original condition.

The House bill does not contain provisions comparable to those contained in section 2 of the conference report. Section 2 is designed to establish the criteria which determine the classification of property by the War Assets Administrator.

Section 2 of the House bill authorizes the disposal of the leasehold covering the Cham-

berlin Hotel, Fort Monroe, Old Point Comfort, Va., to a majority of the former bondholders.

Section 3 of the conference report extends the right to reacquire the hotel to all former bondholders who may wish to participate on a proportional basis.

CARTER MANASCO,

WILL M. WHITTINGTON,

CLARE E. HOFFMAN,

GEO. H. BENDER,

Managers on the Part of the House.

MESSAGE FROM THE PRESIDENT

A message in writing from the President of the United States was communicated to the House by Mr. Miller, one of his secretaries, who also informed the House that on the following dates the President approved and signed bills and joint resolutions of the House of the following titles:

On July 3, 1946:

H. R. 32. An act to amend the act entitled "An act to protect trade and commerce against interference by violence, threats, coercion, or intimidation," approved June 18, 1934;

H. R. 4512. An act to amend the Public Health Service Act to provide for research relating to psychiatric disorders and to aid in the development of more effective methods of prevention, diagnosis, and treatment of such disorders, and for other purposes; and

H. R. 5244. An act to authorize the appointment of additional Foreign Service officers in the classified grades.

On July 5, 1946:

H. R. 1654. An act to provide for the registration and protection of trade-marks used in commerce, to carry out the provisions of certain international conventions, and for other purposes; and

H. R. 6056. An act making appropriations for the Departments of State, Justice, Commerce, and the Judiciary, for the fiscal year ending June 30, 1947, and for other purposes; and

H. R. 6516. An act to increase the salaries of the Metropolitan Police, the United States Park Police, the White House Police, and the members of the Fire Department of the District of Columbia.

On July 8, 1946:

H. R. 6496. An act making appropriations for the Navy Department and the naval service for the fiscal year ending June 30, 1947, and for other purposes.

On July 9, 1946:

H. R. 5990. An act making appropriations for the government of the District of Columbia and other activities chargeable in whole or in part against the revenues of such District for the fiscal year ending June 30, 1947, and for other purposes.

On July 11, 1946:

H. R. 5258. An act granting a renewal of Patent Numbered 113,244 dated February 7, 1939, relating to the flag of the Church of God.

On July 12, 1946:

H. R. 6428. An act making appropriations for the Coast Guard, Treasury Department, for the fiscal year ending June 30, 1947, and for other purposes; and

H. R. 6477. An act to amend section 32 of the Emergency Farm Mortgage Act of 1933, as amended, and section 3 of the Federal Farm Mortgage Corporation Act, as amended, and for other purposes.

On July 13, 1946:

H. R. 6285. An act authorizing the State of Delaware, by and through its State highway department, to construct, maintain, and operate a toll bridge across the Delaware River near Wilmington, Del.

On July 16, 1946:

H. R. 541. An act authorizing and directing the Commissioners of the District of Columbia to construct two 4-lane bridges to replace the existing Fourteenth Street or

Highway Bridge across the Potomac River, and for other purposes;

H. R. 5356. On act to provide assistance to the Republic of China in augmenting and maintaining a Naval Establishment, and for other purposes;

H. R. 5641. An act to authorize the attendance of the Marine Band at the National convention of the United Spanish War Veterans, to be held in Milwaukee, Wis., August 4 to 10, inclusive, 1946;

H. R. 5933. An act to authorize and direct the Board of Public Welfare of the District of Columbia to establish and operate in the public schools and other suitable locations a system of nurseries and nursery schools for day care of school-age and under-school-age children, and for other purposes; and

H. R. 6837. An act making appropriations for the Military Establishment for the fiscal years ending June 30, 1947, and for other purposes.

On July 17, 1946:

H. R. 3424. An act to permit renewal of certain trade-mark registrations after expiry thereof, and for other purposes.

On July 20, 1946:

H. R. 5452. An act making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1947, and for other purposes; and

H. R. 6777. An act making appropriations for Government corporations and independent executive agencies, for the fiscal year ending June 30, 1947, and for other purposes.

On July 23, 1946:

H. R. 6885. An act making appropriations to supply deficiencies in certain appropriations for the fiscal year ending June 30, 1946, and for prior fiscal years, to provide supplemental appropriations for the fiscal year ending June 30, 1946, to provide appropriations for the fiscal year ending June 30, 1947, and for other purposes.

On July 24, 1946:

H. R. 3533. An act to authorize revisions in the boundary of the Hopewell Village National Historic Site, Pennsylvania, and for other purposes;

H. R. 3821. An act to amend sections 4 and 8 of the act of September 2, 1937, as amended;

H. R. 3993. An act to authorize the Secretary of War to sell and convey to the Southern Pacific Railroad Co. a right-of-way and easement for railroad purposes across a portion of Camp Boone Military Reservation, Calif.;

H. R. 4180. An act to amend the law relating to larceny in interstate or foreign commerce;

H. R. 4484. An act relating to the construction and maintenance of building and improvements for banking purposes on the Fort Ord Military Reservation, Calif.;

H. R. 4651. An act to amend section 6 of the Civil Service Retirement Act of May 29, 1930, as amended;

H. R. 4701. An act granting the consent of Congress to the States of Utah, Idaho, and Wyoming to negotiate and enter into a compact for the division of the waters of the Bear River and its tributaries;

H. R. 4917. An act for the relief of the Western Union Telegraph Co.;

H. R. 5800. An act to authorize school districts in Alaska to issue bonds for school construction, and for other purposes;

H. R. 5820. An act relating to mail service on Lake Winnepesaukee, N. H.;

H. R. 5831. An act to include the heads of executive departments and independent agencies within the purview of the Civil Service Retirement Act of May 29, 1930;

H. R. 6041. An act authorizing the State of Indiana to construct, maintain, and operate a free highway bridge across the Wabash River at or near Montezuma, Ind.;

H. R. 6065. An act authorizing the Indiana State Toll Bridge Commission to construct, maintain, and operate a toll bridge or a free bridge across the Ohio River at or near Connelton, Ind.;

SUPPLEMENTAL ESTIMATE OF APPROPRIATION FOR
THE ATOMIC ENERGY COMMISSION

COMMUNICATION

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

SUPPLEMENTAL ESTIMATE OF APPROPRIATION FOR THE FISCAL
YEAR 1947 IN THE AMOUNT OF \$750,000 FOR THE ATOMIC ENERGY
COMMISSION

JULY 25, 1946.—Referred to the Committee on Appropriations, and ordered to
be printed

THE WHITE HOUSE,
Washington, July 25, 1946.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

SIR: I have the honor to transmit for the consideration of Congress a supplemental estimate of appropriation for the fiscal year 1947 in the amount of \$750,000 for the Atomic Energy Commission.

The details of this estimate, the necessity therefor, and the reasons for its submission at this time are set forth in the letter of the Acting Director of the Bureau of the Budget, transmitted herewith, in whose comments and observations thereon I concur.

Respectfully yours,

HARRY S. TRUMAN.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C., July 25, 1946.

The PRESIDENT,
The White House.

SIR: I have the honor to submit herewith for your consideration a supplemental estimate of appropriation for the fiscal year 1947 in the amount of \$750,000 for the Atomic Energy Commission, as follows:

ATOMIC ENERGY COMMISSION

Salaries and expenses: For all expenses necessary to enable the Atomic Energy Commission established by the Atomic Energy Act of 1946 to carry out the provisions of said Act during the fiscal year 1947, including personal services in the District of Columbia and elsewhere without regard to section 14 (a) of the Federal Employees Pay Act of 1946; travel; printing and binding; rent in the District of Columbia; lawbooks, books of reference, newspapers, and periodicals; purchase, operation, maintenance, and repair of two passenger automobiles; contract stenographic reporting services; and not to exceed \$5,000 for deposit in the general fund of the Treasury for the cost of penalty mail as required by section 2 of the Act of June 28, 1944 (Public Law 364)----- \$750, 000

This estimate provides for the initial administrative expenses of the Commission as nearly as these expenses can be forecast at this time. The estimate has been made after careful review of the pertinent provisions of S. 1717 concerning the organization of the Commission.

The foregoing supplemental estimate is made necessary by reason of contingencies which have arisen since the transmission of the Budget for the fiscal year 1947. I recommend that it be transmitted to the Congress.

Very respectfully yours,

PAUL H. APPLEBY,
Acting Director of the Bureau of the Budget.



ATOMIC ENERGY ACT OF 1946

JULY 25, 1946.—Ordered to be printed

Mr. MAY, from the committee of conference, submitted the following

CONFERENCE REPORT

[To accompany S. 1717]

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 1717) for the development and control of atomic energy, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its amendments numbered 1, 19, 25, 28, 30, 32, 34, 37, 43, 44, 45, 47, 49, 52, 53, 56, 59, 60, 61, 62, 64, 65, 66, and 67.

That the Senate recede from its disagreement to the amendments of the House numbered 2, 4, 5, 6, 7, 8, 9, 11, 12, 15, 16, 17, 18, 21, 22, 23, 26, 27, 36, 38, 39, 40, 41, 42, 46, 50, 54, 55, 57, 58, 63, 68, 69, 70, and 71, and agree to the same.

Amendment numbered 3:

That the Senate recede from its disagreement to the amendment of the House numbered 3, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following:

(d) *APPOINTMENT OF ARMY AND NAVY OFFICERS.*—Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 edition, title 10, sec. 576), section 212 of the Act entitled "An Act making appropriations for the Legislative Branch of the Government for the fiscal year ending June 30, 1933, and for other purposes", approved June 30, 1932, as amended (U. S. C., 1940 edition, title 5, sec. 59a), section 2 of the Act entitled "An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety five, and for other purposes", approved July 31, 1894, as amended (U. S. C., 1940 edition, title 5, sec. 62), or any other law, any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to his commissioned status as such officer. Any such officer

serving as *Director of the Division of Military Application* shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in subsection (a) (4) (B) of this section.

And the House agree to the same.

Amendment numbered 10:

That the Senate recede from its disagreement to the amendment of the House numbered 10, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following: *subject to valid claims, rights, or privileges existing on the date of the enactment of this Act*; and the House agree to the same.

Amendment numbered 13:

That the Senate recede from its disagreement to the amendment of the House numbered 13, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following: *, if such individual, corporation, partnership, or association, by reason of having had such part in the development of the atomic bomb project, acquired confidential official information as to the existence of deposits of such uranium, thorium, or other materials in the specific lands upon which such location, entry, or settlement is made, and subsequent to the date of the enactment of this Act made such location, entry, or settlement or caused the same to be made for his, its, or their benefit; and the House agree to the same.*

Amendment numbered 14:

That the Senate recede from its disagreement to the amendment of the House numbered 14, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following:

The Commission shall not—

(1) *Distribute any fissionable material to (A) any person for a use which is not under or within the jurisdiction of the United States, (B) any foreign government, or (C) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.*

(2) *License any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security.*

And the House agree to the same.

Amendment numbered 20:

That the Senate recede from its disagreement to the amendment of the House numbered 20, and agree to the same with an amendment as follows:

In lieu of the House amendment strike out in the Senate engrossed bill on page 25, line 12, the following: "not to exceed one year,"; and the House agree to the same.

Amendment numbered 24:

That the Senate recede from its disagreement to the amendment of the House numbered 24, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be stricken out by the House amendment insert the following:

(1) That until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established, there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes; and

And the House agree to the same.

Amendment numbered 29:

That the Senate recede from its disagreement to the amendment of the House numbered 29, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following: *death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by;* and the House agree to the same.

Amendment numbered 31:

That the Senate recede from its disagreement to the amendment of the House numbered 31, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following: *death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by;* and the House agree to the same.

Amendment numbered 33:

That the Senate recede from its disagreement to the amendment of the House numbered 33, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following: *death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by;* and the House agree to the same.

Amendment numbered 35:

That the Senate recede from its disagreement to the amendment of the House numbered 35, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following:

(5) (A) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has

advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States.

(B) (i) *No arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person with whom such arrangement is made, the contractor or prospective contractor, or the prospective licensee agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security.*

(ii) *Except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual.*

(iii) *Notwithstanding the provisions of subparagraphs (i) and (ii), during such period of time after the enactment of this Act as may be necessary to make the investigation, report, and determination required by such paragraphs, (a) any individual who was permitted access to restricted data by the Manhattan Engineer District may be permitted access to restricted data and (b) the Commission may employ any individual who was employed by the Manhattan Engineer District.*

(iv) *To protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the services of any Government agency to the extent he may deem necessary or desirable.*

(C) *All violations of this Act shall be investigated by the Federal Bureau of Investigation of the Department of Justice.*

And the House agree to the same.

Amendment numbered 48:

That the Senate recede from its disagreement to the amendment of the House numbered 48, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment insert the following: death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by; and the House agree to the same.

Amendment numbered 51:

That the Senate recede from its disagreement to the amendment of the House numbered 51, and agree to the same with an amendment as follows:

In lieu of the matter proposed to be stricken out by the House amendment insert the following: , or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (c), or 12 (a) (2), ; and the House agree to the same.

•A. J. MAY,
R. EWING THOMASON,
CARL T. DURHAM,
CHARLES R. CLASON,

Managers on the Part of the House.

BRIEN McMAHON,
ED C. JOHNSON,
RICHARD RUSSELL,
ARTHUR VANDENBERG,
E. D. MILLIKIN,

Managers on the Part of the Senate.

STATEMENT OF THE MANAGERS ON THE PART OF THE HOUSE

The managers on the part of the House at the conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 1717) for the development and control of atomic energy, submit the following statement in explanation of the effect of the action agreed upon by the conferees and recommended in the accompanying conference report:

Amendment No. 1: The House amendment required at least one member of the Atomic Energy Commission to be a member of the armed forces. The House recedes.

Amendment No. 2: The House amendment requires that the Director of the Division of Military Application be a member of the armed forces. The Senate recedes.

Amendment No. 3: This amendment would permit not to exceed two active or retired officers of the Army or Navy to serve at any one time as members of the Commission, and one such officer to serve as the Director of the Division of Military Application, without prejudice to their status as such officers. The Senate recedes with an amendment which limits the application of this provision to the officer serving as Director of the Division of Military Application.

Amendment No. 4: The Senate bill authorized and directed the Commission to make arrangements (including contracts, agreements, grants-in-aid, and loans) for the conduct of research and development activities. This amendment strikes out the words "grants-in-aid". The Senate recedes.

Amendment No. 5: The bill as it passed the Senate provided that the Commission shall be the exclusive owner of certain facilities for the production of fissionable material. This amendment inserts after the word "Commission" the words "as agent of and on behalf of the United States". The Senate recedes.

Amendment No. 6: This amendment would permit the Commission to authorize its contractors to enter into subcontracts. The Senate recedes.

Amendment No. 7: Under this amendment it is made clear that persons lawfully producing or utilizing fissionable material may expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material. The Senate recedes.

Amendment No. 8: This amendment makes it clear that the authority of the Commission to distribute fissionable material relates to material owned by it. The Senate recedes.

Amendment No. 9: This amendment makes it clear that licenses are required for the exportation of source material from the United States. The Senate recedes.

Amendment No. 10: This amendment struck out the Senate language which excepted existing or inchoate rights and privileges from the reservation for the use of the United States of source materials in deposits in the public lands, and substituted a provision that

such reservation should be subject to valid claims existing on the date of the enactment of the act. The Senate recedes with an amendment which modifies the House provision so as to provide that the reservation for the use of the United States shall be subject to valid claims, rights, or privileges existing on the date of enactment of the act.

Amendments Nos. 11 and 12: These are technical amendments substituting the word "individual" for the word "person", and the Senate recedes.

Amendment No. 13: The Senate bill provided that no person, corporation, partnership, or association which had any part in the development of the atomic-bomb project may benefit by any location, entry, or settlement upon the public domain made after having taken such part in such project. This amendment of the House modified this prohibition so as to make it inapplicable if the benefit was authorized by the Commission. The Senate recedes with an amendment which provides that the prohibition will apply only in cases where, by reason of having taken part in the atomic-bomb project, confidential official information was acquired as to the existence of deposits of source materials in the specific lands upon which the location, entry, or settlement is made, and only in cases where the location, entry, or settlement is made subsequent to the date of the enactment of this act.

Amendment No. 14: This amendment has two purposes. First, to prohibit the Commission from distributing any fissionable material to any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security. Second, to clarify and modify the Commission's authority with respect to source material so as to prohibit the Commission from licensing any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security. The Senate recedes with an amendment to correct the numbering and lettering of the subsection.

Amendment No. 15: This amendment strikes out provisions requiring the Commission to establish by regulation a procedure by which any person who is dissatisfied with the distribution or refusal to distribute to him, or the recall from him, of any fissionable or byproduct materials or with the issuance, refusal, or revocation of a license to him for the transfer or receipt of source materials may obtain a review of such determination by a board of appeal consisting of three members appointed by the Commission. The Senate recedes.

Amendment No. 16: This is a clerical amendment. The Senate recedes.

Amendment No. 17: Under this amendment the President from time to time may direct the Commission to deliver such quantities of fissionable materials to the armed forces for such use as he deems necessary in the interest of national defense. The Senate recedes.

Amendment No. 18: Under this amendment the President from time to time may direct the Commission to authorize the armed forces to manufacture, produce, or require any equipment or device utilizing fissionable material or atomic energy as a military weapon. The Senate recedes.

Amendment No. 19: This amendment excepted activities authorized by the Commission under section 6 (a) from the prohibition

contained in section 6 (b) against manufacturing, producing, transferring, or acquiring equipment or devices utilizing fissionable material or atomic energy as a military weapon. Since the Senate bill already excepts from this prohibition all activities authorized by the Commission, this amendment merely duplicated in part the exception in the Senate bill and, consequently, is unnecessary. The House recedes.

Amendment No. 20: This amendment, as agreed to in conference, provides that licenses authorizing certain activities with respect to fissionable material or atomic energy shall be issued for a specified period, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon expiration of such period. The bill as it passed the Senate provided that licenses could not be issued for a period to exceed 1 year. The House amendment provided that such licenses could not be issued for a period of less than 1 year.

Amendment No. 21: This is a clerical amendment. The Senate recedes.

Amendment No. 22: This amendment provides that no license relating to the utilization of atomic energy may be given to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to common defense and security. The Senate recedes.

Amendment No. 23: This amendment makes clear that the definition of "international arrangement" includes only an international agreement approved by the Congress after the Atomic Energy Act of 1946 becomes law. The Senate recedes.

Amendment No. 24: This amendment, as agreed to in conference, is a statement of principle to be followed by the Commission that until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes. The House amendment proposed to strike out the statement of principle in the bill as it passed the Senate that such information should be shared with other nations on a reciprocal basis as soon as the Congress declares by joint resolution that such safeguards have been established.

Amendment No. 25: This amendment relates to the numbering of a paragraph, and the House recedes.

Amendment No. 26: This amendment struck out the provision of the Senate bill which specifically authorized and directed the Commission to establish information services, publications, libraries, and other registers of information. The Senate recedes.

Amendment No. 27: This amendment relates to the lettering of a subsection. The Senate recedes.

Amendment No. 28: This amendment would have required a unanimous vote of the Commission for it to determine that any data could be published without adversely affecting the common defense and security. The House recedes.

Amendments Nos. 29, 30, 31, 32, 33, 34, 48, and 49: These amendments provided that the death penalty might be imposed upon persons convicted of violating certain provisions of the act, with intent to injure the United States or with intent to secure an advantage to any

foreign nation, and provided that the minimum term of imprisonment for persons convicted of such violations should be 10 years. The conference agreement provides that the penalty of death or imprisonment for life may be imposed, but only upon the recommendation of the jury and only in the case of offenses committed with intent to injure the United States. The provisions for minimum terms of imprisonment of 10 years are eliminated.

Amendment No. 35: The bill as it passed the Senate provided that no person shall be prosecuted for any violation of the provisions relating to restricted data unless and until the Attorney General has advised and consulted with the Commission with respect to such prosecution.

The House amendment struck out the Senate provision and provided that the Commission shall make no contract under sections 3 or 4, issue no license to any person, nor employ any person until the Federal Bureau of Investigation shall have first made an investigation of the character and associations of such person and certified that the character of such contractor, licensee, or employee is such as not to endanger the common defense or security.

The Senate recedes with an amendment which provides that (1) no person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States; (2) no arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person dealing with the Commission agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security; (3) except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual; (4) during such period of time after the enactment of this act as may be necessary to make such investigation, report, and determination, individuals who were permitted access to restricted data by the Manhattan Engineer District may be permitted access to restricted data and the Commission may employ individuals who were employed by the Manhattan Engineer District; (5) to protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the services of any Government agency to the extent he may deem necessary or desirable; and (6) all violations of this act shall be investigated by the Federal Bureau of Investigation of the Department of Justice.

Amendment No. 36: This is a clerical amendment and the Senate recedes.

Amendment No. 37: The Senate bill provided that no patent should be granted after the date of enactment of the act for any invention or discovery which is useful solely in the production of fissionable

material or in the utilization of fissionable material or atomic energy for a military weapon and provided for the revocation of any patent previously issued for any such invention or discovery and payment of just compensation to the owner of the patent. The Senate bill further provided (1) that no patent granted after the date of enactment of the act should confer any rights with respect to any invention or discovery to the extent that it is used in the production of fissionable material, the utilization of fissionable material or atomic energy for a military weapon, or the conduct of research or development activities in the atomic energy field; and (2) that any rights conferred by any patent previously issued should be revoked to the extent that the invention or discovery should be so used and that just compensation should be made for the revocation of rights. The House amendment contained no provisions comparable to the above-described provisions of the Senate bill.

The Senate bill provided that any person who has made or may make an invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon should make a report to the Commission within a limited period of time describing such invention or discovery, unless it is described in an application for patent filed in the Patent Office within such period of time. The House amendment contained a similar provision requiring reports to the Commission with respect to inventions and discoveries, but such provision was applicable only to inventions or discoveries "utilizing fissionable materials or atomic energy designed or especially adapted for use as or in a military weapon."

The Senate bill placed a duty on the Commission to declare any patent to be affected with the public interest if (1) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy, and (2) the use of such invention or discovery by persons having licenses for the utilization of atomic energy is necessary to effectuate the policies and purposes of the act. In any case in which a patent should be declared to be affected with the public interest the Commission would be licensed to use the invention or discovery and persons having licenses from the Commission for the utilization of atomic energy would be licensed to use it to the extent necessary in carrying on their activities licensed by the Commission. The owner of the patent would be entitled to a reasonable royalty fee for the use of the invention or discovery, the fee to be agreed upon by the owner and the licensee or to be fixed by the Commission in the absence of an agreement. The Senate bill contained appropriate provisions preventing court proceedings to stay, restrain, or enjoin the use of inventions or discoveries licensed under the provisions of the bill and to provide for the collection through court proceedings of royalty fees for the use of inventions or discoveries so licensed. The House amendment contained no provisions comparable to those described in this paragraph.

The Senate bill authorized the Commission to purchase, or to take, requisition, or condemn, and make just compensation for (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or

patent application covering any such invention or discovery. The bill required the Commissioner of Patents to notify the Commission of, and to provide it access to, all applications for patents which in his opinion disclose such inventions or discoveries. The House amendment authorized the Commission to purchase, for the manufacture or use by or for the United States Government, any and all rights in and to any invention or discovery, or application for patent or patent thereon, relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy. The House amendment authorized the Commission to condemn any or all rights to any such invention or discovery which affects the national defense and security, but provided that whenever the Commission determined that the national defense or security were no longer involved any and all rights in such invention or discovery would revert to the owner, subject to a nonexclusive, irrevocable, and nontransferable license in favor of the Government.

The House amendment provided that any person making an invention or discovery relating to research on or the production of fissionable material or the utilization of fissionable material or atomic energy should, upon filing an application for a patent thereon and tendering the invention or discovery to the United States for its use, have the right to sue the United States for compensation for the use of such invention or discovery in the event he should ultimately receive a patent thereon. The Commission was authorized to make an agreement with the inventor in settlement for the use of his invention by the Government. The Senate bill contained no comparable provisions to those described in this paragraph.

The Senate bill provided for the designation by the Commission of a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications filed with the Commission for (1) the determination of reasonable royalty fees in connection with patents declared to be affected with the public interest and licensed for use by persons having atomic energy utilization licenses from the Commission, (2) the payment of just compensation for patents and patent rights revoked under the Senate bill, and (3) the grant of awards by the Commission to persons making inventions or discoveries useful solely, or among other purposes, for the production of fissionable material or the utilization of fissionable material or atomic energy for a military weapon. The bill provided that in fixing royalty fees the Commission should take into consideration any defense, general or special, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, the patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and might take into consideration the cost to the owner of the patent of developing the invention or discovery or acquiring the patent. The bill provided that the Commission, in connection with applications for just compensation and awards, should take into account the same factors considered by it in fixing royalty fees, and also the actual use of the invention or discovery. The Senate bill provided that any person aggrieved by a Commission determination upon an application for an award or the fixing of a reasonable royalty fee might obtain a review thereof in the Court of Appeals for the District of Columbia. The House amendment contained no provisions with respect to the fixing of royalty fees or the payment of awards to inventors.

The House amendment provided that persons dissatisfied with Commission determinations as to just compensation for inventions or discoveries condemned, or tendered to and used, by the Commission should have the right to maintain suit in the United States District Court for the District of Columbia for the purpose of determining the just compensation to be paid. The amendment further provided for an appeal to the Court of Appeals of the District of Columbia from the decision of the district court. The section of the Senate bill relating to patents contained no specific provisions with respect to judicial determination of just compensation for patents and patent rights revoked by the section or taken, requisitioned, or condemned by the Commission. Section 11 of the Senate bill provided, however, for suit in the Court of Claims in the event the person entitled to just compensation should be dissatisfied with the determination of the Commission.

The House recedes on this amendment.

Amendment No. 38: This amendment struck out the provision authorizing attorneys appointed by the Commission to appear for and represent the Commission in any case in any court. The Senate recedes.

Amendment No. 39: This amendment struck out the provision which waived certain general restrictions of law in the expenditure of funds for the purposes specified in section 10 (b). Since amendment No. 26 struck out section 10 (b), this provision is no longer appropriate. The Senate recedes.

Amendment No. 40: This is a clerical amendment and the Senate recedes.

Amendment No. 41: This amendment provided that section 10 of the Administrative Procedure Act should be applicable with respect to agency actions of the Commission immediately upon the enactment of this act and provided that this act should not be held to supersede or modify the Administrative Procedure Act. The Senate recedes.

Amendment No. 42: This is a clerical amendment and the Senate recedes.

Amendments Nos. 43, 44, and 45: These amendments increased from 9 to 11 the number of Members from each House who would be members of the Joint Committee on Atomic Energy, and increased from 5 to 6 the number of Members from each House who might be members of the same political party. The House recedes.

Amendment No. 46: This is a clerical amendment, and the Senate recedes.

Amendment No. 47: This amendment made the heavier criminal penalties provided in subsection (a) of the enforcement section, rather than the lighter penalties under subsection (b), applicable in the case of violations of the act arising out of the failure to report certain inventions and discoveries to the Commission. The House recedes.

Amendment No. 50: This is a clerical amendment, and the Senate recedes.

Amendment No. 51: This amendment eliminated from the bill the provisions which would have provided criminal penalties for violations of regulations or orders issued under specified sections of the Act. The Senate recedes with an amendment which restores the provision with a clerical change correcting a cross reference.

Amendments Nos. 52 and 53: These amendments, like some of those referred to above, provided that the death penalty might be imposed

upon persons convicted of violating certain provisions of the act, with the intent to injure the United States or to secure an advantage to any foreign nation, and provided that the minimum term of imprisonment for persons convicted of such violations should be 10 years. As the offenses to which these amendments were applicable are likely to be of a less serious nature than the other offenses to which the heavy penalties were made applicable, these penalties were deemed to be excessive in these cases and the House recedes.

Amendments Nos. 54 and 55: These amendments modified the provision relating to enjoining violations of the act or regulations or orders thereunder, so that instead of providing, as did the Senate bill, that upon a showing by the Commission that a person has engaged or is about to engage in such a violation an injunction, restraining order, or other order shall be granted without bond, it will provide that upon such a showing an injunction, restraining order, or other order may be granted. The Senate recedes.

Amendment No. 56: This amendment provided that all persons associated in any capacity with the control and development of atomic energy under the Commission, and all violations of this act, should be investigated by the Federal Bureau of Investigation. As the subject matter of this amendment is dealt with in connection with amendment No. 35, the House recedes on this amendment.

Amendments Nos. 57 and 58: These are clerical amendments, and the Senate recedes.

Amendment No. 59: The amendment inserted a definition of the term "nuclear fission". The House recedes.

Amendments Nos. 60, 61, and 62: These are clerical amendments, and the House recedes.

Amendment No. 63: This is a technical amendment, and the Senate recedes.

Amendments Nos. 64, 65, and 66: These are clerical amendments, and the House recedes.

Amendment No. 67: The bill as it passed the Senate defined the term "facilities for the production of fissionable material" so as to include any equipment or device capable of such production. This amendment limited the term to any equipment or device peculiarly adopted for and capable of such production. The House recedes.

Amendment No. 68: This is a clerical amendment, and the Senate recedes.

Amendment No. 69: This amendment struck out a provision transferring funds available for expenditure in connection with the Manhattan Engineer District to the Commission for expenditure for the purpose of carrying out the provisions of the Act. The Senate recedes.

Amendments Nos. 70 and 71: These are clerical amendments, and the Senate recedes.

A. J. MAY,
R. EWING THOMASON,
CARL T. DURHAM,
CHARLES R. CLASON,
Managers on the Part of the House.

DIGEST OF CONGRESSIONAL PROCEEDINGS OF INTEREST TO THE DEPARTMENT OF AGRICULTURE

OFFICE OF BUDGET AND FINANCE
Legislative Reports and Service Section
(For Department staff only)

Issued July 29, 1946
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HIGHLIGHTS: Senate committee reported Flannagan-Hope research-marketing bill. Senate concurred in House amendments to congressional-reorganization bill. Both Houses agreed to conference report on atomic-energy bill. Senate passed railroad-retirement bill. House rejected bill to provide for site acquisition and design of Federal buildings. House passed bill to designate State Department disposal agency for surplus property outside U.S. House passed vocational-education bill, which increases authorizations for agricultural categories. House concurred in Senate amendments to Monasco bill providing substantive authority for various administrative expense provisions of Independent Offices Act. Senate passed measure to continue authority for alcohol plants to produce sugars. House agreed to conference reports on mineral-leasing and Cooley farm-credit bills. House passed measures to: Amend Mill Act; continue RFC; and regulate garbage importation. House agreed to adjourn sine die Aug. 2.

SENATE - July 26

- 1. RESEARCH; MARKETING.** The Agriculture and Forestry Committee reported with amendments H. R. 6932, the Flannagan-Hope research and marketing bill (S. Rept. 1843) (p. 10250). The committee agreed to amendments to reduce the size of the advisory committee to 11 members; to provide that, to the maximum extent practicable, the marketing research ~~done in cooperation with the States shall be done in co-~~ operation with the State experiment stations and such other appropriate agencies as shall be mutually agreeable to them and the Department, and to provide for a similar arrangement regarding the State extension services with respect to the marketing educational and demonstrational work, and regarding the State departments of agriculture and the State departments and bureaus of markets with respect to the informational, inspection, regulatory work, and other marketing services; to change "full employment" to "maximum employment" in the declaration of policy; to direct the Department to foster and assist in "expanded" markets and uses, both foreign and domestic; to specify research and marketing in connection with the marketing work; to include fish and shellfish as agricultural commodities for the purposes of the bill; and to correct a citation under Sec. 11.
- 2. CONGRESSIONAL REORGANIZATION.** Concurred in the House amendments to S. 2177, the LaFollette-Monroney congressional reorganization bill (pp. 10274-87). This bill will now be sent to the President.
As finally passed, this bill provides as follows: Provides that, by Mar. 1 each year, the revenue and appropriation committees shall make an over-all estimate of receipts and expenditures, including a reserve for deficiencies, and

shall report a concurrent resolution (1) to provide for reduction of the public debt if receipts are estimated to exceed expenditures or (2) to express it as the sense of Congress that the public debt be increased by the amount that estimated expenditures may exceed estimated receipts. Provides for at least 3 day between the time an appropriation bill is reported and considered on the floor. Requires that all hearings before standing committees or their subcommittees shall be open except executive sessions for marking up bills or for voting or where the committee by a majority vote orders an executive session. Provides committees and subcommittees with staffs of specialists and permits the House Appropriations Committee to continue its investigation system. Takes steps toward limiting permanent appropriations. Authorizes the standing committees to exercise continuous surveillance of the execution of the laws by administrative agencies within their jurisdiction. Directs GAO to make expenditure analyses of each agency of the executive branch, including corporations. Provides that, except in war or emergency in general Congress shall stand adjourned during July, August, and September of each year, reconvening on the second Tuesday in October. Requires that the Congressional Record include a daily calendar of legislative events, together with resumes of congressional activities and an index of its contents. Increases salaries of members of Congress from \$10,000 to \$12,500, and continues the \$2,500 expense account. Permits members of Congress to retire under the Civil Service Retirement Act. Delegates the handling of claims to the departments and the courts and prohibits introduction of most private bills. Reconstitutes the committees and reduces them in number, but retains the Senate Agriculture and Forestry Committee and the House Agriculture Committee. Authorizes increases in the legislative-reference and bill-drafting services. Provides for changes in committee procedure as regards hearings, meetings, and records. Provides for registration of organized groups and their agents who seek to influence legislation. Provides that the President's Economic Report be filed at the opening of each regular session and that the Joint Committee make its report by Feb. 1. Strengthens the provisions against inclusion of point-of-order items in appropriation bills. Requires the Appropriations Committees to develop a standard appropriation classification schedule which will clearly define subtotals.

3. **ATOMIC ENERGY.** Both Houses agreed to the conference report on S. 1717, to provide for the development and control of atomic energy (pp. 10302-3, 10325-31). This bill will now be sent to the President.
4. **RAILROAD RETIREMENT.** Passed with amendments H. R. 1362, to amend the Railroad Retirement Act (pp. 10255-60, 10263-74, 10287-306). Agreed, 40-35, to the Hoe amendment striking out the provision which would extend benefits to employees of freight forwarders and railroad-connected trucking companies (p. 10293).
5. **TRANSPORTATION.** Sen. Reed, Kans., made a motion for consideration of H. R. 2536, the Bulwinkle bill to amend the Interstate Commerce Act with respect to certain agreements between carriers, but no action was taken (p. 10306).
6. **ADMINISTRATIVE PROCEDURE.** Public Law 404, the Administrative Procedure Act, was ordered printed as S. Doc. 248 with the legislative history (p. 10252).
7. **PRICE CONTROL.** Sen. Taft, Ohio, inserted his statement to the effect that the new price-control law is more inflationary than the one the President vetoed (pp. 10306-7).
8. **FORESTRY.** Both Houses received the GAO audit report on the Spruce Production Corporation (pp. 10250, 10360).

The more enlightened industries realize that fact, whether they want it to take place or not. It must take place if we are to preserve our democratic form of government. We might just as well recognize the fact that if we turn back the wheels of progress, there is no telling what will happen in the United States of America.

Mr. TAFT. Mr. President, will the Senator yield?

Mr. WHEELER. I yield.

Mr. TAFT. I merely wish to point out that there are many increased benefits still remaining in the bill. All the increased benefits relating to annuities and disabilities are still in the bill. The only thing objected to is the extension of unemployment compensation and sickness and maternity benefits. Those are subjects which are not the purpose of an unemployment compensation law, or a tax in that connection.

Mr. WHEELER. As I said a moment ago, Mr. President, these benefits which some of us seem to wish to prevent are coming along in the United States and neither the Senator from Ohio nor anyone else will be able to stop them. If the Senator wishes to eliminate them, why not suggest that the entire bill be defeated. That is what is being done. And let us not then say that something is being done for the railroad men, because such a contention is ridiculous.

Mr. HAWKES. Mr. President, will the Senator yield?

Mr. WHEELER. I yield.

Mr. HAWKES. I cannot talk unless the Senator yields to me because I have no time of my own remaining. Does the Senator believe that the weekly payments under unemployment compensation of more than a million persons in the United States, including payments for sickness and maternity benefits, which are not occupational in any way, can be increased without nearly all American society being upset because of what has been done for one segment of the population? Does not the Senator believe, as I do, that we would be doing a better job if we took the report of the House concerning the over-all social security question and tried to straighten out the problem on a fair relative basis as to each group involved?

Mr. WHEELER. The Senator complained earlier in the day that no consideration had been given to this bill by the committee. Now he offers an amendment which was not discussed by the committee and was not considered at all with reference to the matter of decreasing rates. Ever since bills on this subject came before the committee the railroads have had an opportunity to appear there and ask that a reduction be made, but they never came at any time. I do not know whether they appeared before the House committee; but, certainly, they did not come before the Senate committee and ask that the proposed reduction be made.

Mr. HAWKES. A similar amendment going further than my amendment would go was before the committee for months.

Mr. WHEELER. Yes. The Senator complained once before today that this bill did not receive any consideration by the Senate committee, and that no mem-

ber of the committee had given it any thought.

Mr. HAWKES. I have not changed my mind whatever about that matter.

Mr. WHEELER. The Senator now offers an amendment which no member of the committee has had an opportunity to consider at any time. It was never discussed or proposed.

Mr. HAWKES. Then, in respect to the consideration which it has received, both the bill and the amendment are in the same category.

Mr. WHEELER. No; the Senator is entirely incorrect. Hearings were held on the bill, and the Senator was a member of the subcommittee, and so was I. I discussed the bill from time to time with the members of the subcommittee. But no hearings have ever been held on the Senator's amendment, and no arguments have been made. I have not heard anything from the railroad employees or from the opposition. What the Senator is proposing was suggested in the House with reference to a reduction. If the Senator wishes to proceed without giving the opposition an opportunity to be heard, of course that can be done, but it is not fair to come before the Senate with a one-sided amendment which represents the views, perhaps, of the railroads, when the railroads themselves never came before the committee and advocated the adoption of the amendment.

Mr. HAWKES. I may say to the Senator, if he will permit me to do so, that this amendment is not at all detrimental because the minute the fund gets down to \$200,000,000 the percentage of tax increases.

Mr. WHEELER. That is the Senator's statement, but I am frank to say to him that I am not familiar with the facts or the figures in connection with the subject, and I submit that no one else is familiar with them.

Mr. HAWKES. I have been informed that even a more severe amendment was adopted by the Committee of the Whole of the House of Representatives.

Mr. WHEELER. I understand that, but it was subsequently eliminated. I am talking about the Senate Committee on Interstate Commerce. That committee never held any hearings on the amendment. The railroads did not appear and say anything in favor of it, and neither did the railroad brotherhoods. They had no opportunity to appear and testify with regard to the amendment.

Mr. AUSTIN. Mr. President, will the Senator yield?

Mr. WHEELER. I yield.

Mr. AUSTIN. I wish to rebut the statement of the Senator from Montana that the railroads did not oppose this bill. To be sure, they did not oppose what is reflected in the amendment. But all I need to do is to call the attention of the Senate to the record which shows how definitely the railroads did oppose this bill. I read from the statement of J. Carter Fort, vice president and general counsel of the Association of American Railroads, as set forth on page 159 of the hearings:

This bill would provide for total taxes in the railroad industry of 15½ percent of the

pay roll for that purpose. Is there any reason to think that Congress is ready to set aside any such percent as that for general social security purposes, or that the people in this country are ready to do so? Certainly there has been no indication that they are. Congress refused, as late as last December, to raise the general social-security pay-roll tax of 1 percent on each employer and employee to 2 percent; and yet here you are asked to force upon the railroads a system which would require, according to these estimates, 15½ percent. And there is every reason to think that the estimates are much too low and that the cost would run way up above 15½ percent, perhaps up to 20 percent.

I do not believe this Congress is ready to do that. The thinking of the people isn't ready for that. Nothing could be more "premature" than the measure before you, to use the language which Mr. Miller used in his testimony. You are dealing with a profound subject, and you are asked to dispose of it in a few days and with respect to just a few people. Nothing can bring worse confusion in this country than such an approach to a problem of such magnitude.

I conclude with only one comment. The reference which has been made to this bill as being one which deals with general social-security purposes is perfectly justified, because we have departed from the original design of industrial protection of all, and gone into the remote field of providing benefits for those who are not at all connected directly with industry and for the family generally.

Mr. WHEELER. I wish to say that the Senator is entirely mistaken. I agree with him when he says that the railroads opposed this bill. What I said was that the amendment which has been offered with reference to the reduction of payments was never discussed by the committee at any time in the last 24 years during which I have been a member of the committee, nor since the bill was adopted originally.

MESSAGE FROM THE HOUSE

A message from the House of Representatives, by Mr. Maurer, one of its reading clerks, announced that the House had agreed to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 1717) for the development and control of atomic energy.

The message also announced that the House had agreed to a concurrent resolution (H. Con. Res. 163) authorizing the printing of a revised edition of the Biographical Directory of the American Congress up to and including the Eightieth Congress, in which it requested the concurrence of the Senate.

The message further announced that the Speaker had affixed his signature to the following enrolled bills, and they were signed by the President pro tempore:

S. 162. An act for the relief of Walter S. Faulkner;

S. 496. An act to make it a criminal offense for certain escaped convicts to travel from one State to another;

S. 1235. An act to authorize the use of the funds of any tribe of Indians for insurance premiums;

S. 1477. An act to authorize relief in certain cases where work, supplies, or services have been furnished for the Government under contracts during the war;

S. 1549. An act for the relief of the legal guardian of Duane N. Thompson;

S. 1561. An act to amend the act entitled "Compensation for injury, death, or detention of employees of contractors with the United States outside the United States," as amended, for the purpose of making the 100-percent earning provisions effective as of January 1, 1942;

S. 1573. An act for the relief of James H. Wilkinson;

S. 1640. An act to provide for the acquisition by the United States of certain real property in the District of Columbia;

S. 1674. An act for the relief of Michael Joseph Bennett, a minor;

S. 1731. An act for the relief of Lester A. Dessez;

S. 1751. An act for the relief of Wayne Parker;

S. 1890. An act for the relief of the Crosby Yacht Building and Storage Co., Inc.;

S. 1910. An act for the relief of George D. King;

S. 2036. An act granting the consent of Congress to the State of Rhode Island to construct, maintain, and operate a free highway bridge across the Sakonnet River between the towns of Tiverton and Portsmouth in Newport County, R. I.;

S. 2247. An act to permit the Secretary of the Navy to delegate the authority to compromise and settle claims against the United States caused by vessels of the Navy or in the naval service, or for towage or salvage services to such vessels, and for other purposes;

S. 2253. An act to further amend the act of January 16, 1936, as amended, entitled "An act to provide for the retirement and retirement annuities of civilian members of the teaching staff at the United States Naval Academy and the Postgraduate School, United States Naval Academy";

S. 2259. An act to amend the Philippine Rehabilitation Act of 1946, for the purpose of making a clerical correction;

S. 2260. An act for the relief of Roy M. Davidson;

S. 2349. An act to permit the Secretary of the Navy to delegate the authority to compromise and settle claims for damages to property under the jurisdiction of the Navy Department, and for other purposes;

S. 2369. An act for the relief of Col. S. V. Constant, General Staff Corps; and

S. 2405. An act to define the area of the United States Capitol Grounds, to regulate the use thereof, and for other purposes.

HOUSE CONCURRENT RESOLUTION REFERRED

The concurrent resolution (H. Con. Res. 163) authorizing the printing of a revised edition of the Biographical Directory of the American Congress up to and including the Eightieth Congress, was read twice by its title and referred to the Committee on Printing.

PRINTING OF REVISED EDITION OF BIOGRAPHICAL DIRECTORY OF THE AMERICAN CONGRESS

Mr. HAYDEN. Mr. President, from the Committee on Printing I ask unanimous consent to report favorably House concurrent resolution 163, authorizing the printing of a revised edition of the Biographical Directory of the American Congress up to and including the Eightieth Congress, and I request its present consideration.

There being no objection, the concurrent resolution was considered and agreed to, as follows:

Resolved by the House of Representatives (the Senate concurring), That there shall be compiled and printed, with illustrations, as a House document, in such style and form

as may be directed by the Joint Committee on Printing, a revised edition of the Biographical Directory of the American Congress up to and including the Eightieth Congress (1774-1948); and that 3,500 additional copies shall be printed, of which 2,300 copies shall be for the use of the House of Representatives, 800 copies for the use of the Senate, and 400 copies for the use of the Joint Committee on Printing.

PRINTING AND PREPARATION OF SENATE RULES AND MANUAL FOR EIGHTIETH CONGRESS

Mr. HAYDEN. Mr. President, from the Committee on Printing, I ask unanimous consent to report favorably without amendment Senate Resolution 285, providing for the preparation and printing of the Senate Rules and Manual for the Eightieth Congress, submitted by the Senator from Virginia [Mr. BYRD] on June 13, 1946, and I request its present consideration.

There being no objection, the resolution was considered and agreed to, as follows:

Resolved, that the Committee on Rules be, and it is hereby, directed to prepare a revised edition of the Senate Rules and Manual for the use of the Eightieth Congress, and that 1,500 additional copies shall be printed and bound, of which 1,000 copies shall be for the Senate, 200 copies for the use of the Committee on Rules, and the remaining 300 copies shall be bound in full morocco and tagged as to contents and delivered as may be directed by the committee.

DEVELOPMENT AND CONTROL OF ATOMIC ENERGY—CONFERENCE REPORT

Mr. McMAHON submitted the following report:

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 1717) for the development and control of atomic energy, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its amendments numbered 1, 19, 25, 28, 30, 32, 34, 37, 43, 44, 45, 47, 49, 52, 53, 56, 59, 60, 61, 62, 64, 65, 66, and 67.

That the Senate recede from its disagreement to the amendments of the House numbered 2, 4, 5, 6, 7, 8, 9, 11, 12, 15, 16, 17, 18, 21, 22, 23, 26, 27, 36, 38, 39, 40, 41, 42, 46, 50, 54, 55, 57, 58, 63, 68, 69, 70, and 71, and agree to the same.

Amendment numbered 3: That the Senate recede from its disagreement to the amendment of the House numbered 3 and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following:

"(d) Appointment of Army and Navy officers: Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 edition, title 10, sec. 576), section 212 of the Act entitled "An Act making appropriations for the Legislative Branch of the Government for the fiscal year ending June 30, 1933, and for other purposes," approved June 30, 1932, as amended (U. S. C., 1940 edition, title 5, sec. 59a), section 2 of the Act entitled "An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety five, and for other purposes", approved July 31, 1894, as amended (U. S. C., 1940 edition, title 5, sec. 62), or any other law, any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without

prejudice to his commissioned status as such officer. Any such officer serving as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in subsection (a) (4) (B) of this section.

And the House agree to the same.

Amendment numbered 10: That the Senate recede from its disagreement to the amendment of the House numbered 10, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "subject to valid claims, rights, or privileges existing on the date of the enactment of this Act"; and the House agree to the same.

Amendment numbered 13: That the Senate recede from its disagreement to the amendment of the House numbered 13, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "if such individual, corporation, partnership, or association, by reason of having had such part in the development of the atomic bomb project, acquired confidential official information as to the existence of deposits of such uranium, thorium, or other materials in the specific lands upon which such location, entry, or settlement is made, and subsequent to the date of the enactment of this Act made such location, entry, or settlement or caused the same to be made for his, its, or their benefit"; and the House agree to the same.

Amendment numbered 14: That the Senate recede from its disagreement to the amendment of the House numbered 14, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following:

"The Commission shall not—

"(1) Distribute any fissionable material to (A) any person for a use which is not under or within the jurisdiction of the United States, (B) any foreign government, or (C) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.

"(2) License any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security."

And the House agree to the same.

Amendment numbered 20: That the Senate recede from its disagreement to the amendment of the House numbered 20, and agree to the same with an amendment as follows: In lieu of the House amendment strike out in the Senate engrossed bill on page 25, line 12, the following: "not to exceed one year,"; and the House agree to the same.

Amendment numbered 24: That the Senate recede from its disagreement to the amendment of the House numbered 24, and agree to the same with an amendment as follows: In lieu of the matter proposed to be stricken out by the House amendment insert the following:

"(1) That until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established, there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes; and."

And the House agree to the same.

Amendment numbered 29: That the Senate recede from its disagreement to the amendment of the House numbered 29, and agree to the same with an amendment as

follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 31: That the Senate recede from its disagreement to the amendment of the House numbered 31, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 33: That the Senate recede from its disagreement to the amendment of the House numbered 33, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 35: That the Senate recede from its disagreement to the amendment of the House numbered 35, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following:

"(5) (A) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States.

"(B) (1) No arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person with whom such arrangement is made, the contractor or prospective contractor, or the prospective licensee agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security.

"(2) Except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual.

"(3) Notwithstanding the provisions of subparagraphs (1) and (2), during such period of time after the enactment of this Act as may be necessary to make the investigation, report, and determination required by such paragraphs, (a) any individual who was permitted access to restricted data by the Manhattan Engineer District may be permitted access to restricted data and (b) the Commission may employ any individual who was employed by the Manhattan Engineer District.

"(4) To protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the serv-

ices of any Government agency to the extent he may deem necessary or desirable.

"(C) All violations of this Act shall be investigated by the Federal Bureau of Investigation of the Department of Justice."

And the House agree to the same.

Amendment numbered 48: That the Senate recede from its disagreement to the amendment of the House numbered 48, and agree to the same with an amendment as follows: In lieu of the matter proposed to be inserted by the House amendment insert the following: "death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by"; and the House agree to the same.

Amendment numbered 51: That the Senate recede from its disagreement to the amendment of the House numbered 51, and agree to the same with an amendment as follows: In lieu of the matter proposed to be stricken out by the House amendment insert the following: "or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (c), or 12 (a) (2)"; and the House agree to the same.

BRIEN McMAHON,
ED C. JOHNSON,
RICHARD RUSSELL,
ARTHUR VANDENBERG,
E. D. MILLIKIN,

Managers on the Part of the Senate.

A. J. MAY,
R. EWING THOMASON,
CARL T. DURHAM,
CHARLES R. CLASON,

Managers on the Part of the House.

Mr. McMAHON. Mr. President, I ask unanimous consent for the immediate consideration and adoption of the conference report.

There being no objection, the report was considered and agreed to.

ESTATE OF WILLIAM EDWARD OATES— CONFERENCE REPORT

Mr. O'DANIEL submitted the following report:

The committee of conference on the disagreeing votes of the two Houses on the amendment of the House to the bill (S. 78) entitled "An Act for the relief of the estate of William Edward Oates," having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its disagreement to the amendment of the House, and agree to the same with an amendment as follows: In lieu of the sum passed by the House insert "\$5,953"; and the House agree to the same.

W. LEE O'DANIEL,
GEO. A. WILSON,

Managers on the Part of the Senate.

J. M. COMES,
E. H. HEDRICK,
W. A. PITTENGER,

Managers on the Part of the House.

The report was agreed to.

AMENDMENT TO RAILROAD RETIREMENT ACTS, ETC.

The Senate resumed consideration of the bill (H. R. 1362) to amend the Railroad Retirement Acts, the Railroad Unemployment Insurance Act, and subchapter B of chapter 9 of the Internal Revenue Code; and for other purposes.

Mr. MURDOCK. Mr. President, not being a member of the committee which reported the pending bill, I feel a little presumptuous in speaking with reference to it, but I do have a few thoughts con-

cerning the amendment to the bill which I wish to express.

UNEMPLOYMENT INSURANCE IMPROVEMENTS

When we first enacted unemployment insurance in this country, more than 10 years ago, it was decided that 3 percent of pay roll was about the right amount to devote to that purpose. We were still in the depression of the 1930's, billions were appropriated each year for relief and work relief, unemployment was heavy, and the prospects of continued industrial employment were gloomy. To keep within that limit of 3 percent of pay roll, the benefits under unemployment insurance were made picayune, and we embodied all sorts of restrictions, by way of qualifying conditions, disqualifications, waiting periods, and the like. But we made a start. Even with those niggardly benefits and all those restrictions on drawing any benefits, some people predicted that the system would fail because it could not be supported by a 3-percent-pay-roll tax.

When the Railroad Unemployment Insurance Act was enacted, the same pay-roll tax of 3 percent was levied as was imposed upon other industries covered by the various unemployment insurance laws. Since that time, experience has shown that we had been too pessimistic in our estimates of what this 3 percent could support. Benefits have been increased somewhat. Under the State laws the average unemployed person already draws about 20 percent more than the average unemployed person covered by the Railroad Act, and the State laws are continually being further liberalized. Benefits can now be considerably increased under the railroad system without any change in the tax rate. This bill which we are enacting does so in three ways.

It will remove the distinction between unemployment caused by there being no work for the individual to perform and unemployment caused by his inability to work, and so will pay benefits for unemployment caused by a worker's sickness as well as by his loss of a job for economic reasons.

Unemployment benefits are now paid under the Railroad Unemployment Insurance Act on a graduated scale, depending on previous earnings. The maximum is now \$20 per week for full unemployment for an employee who earned more than \$1,600 in a test base period. This is a lower maximum than is already provided in a great many States. The changes the bill makes in the rate of benefits do not affect those who earned less than \$2,000 in the test period; benefits of employees who earned up to that amount would remain the same. But since the scale of benefits in the present law was enacted, rates of pay have advanced materially while the old scale remains geared to lower earnings. This bill increases the maximum rate of benefits of those who earned \$2,000 or more in the base period. The maximum for those who earned at least \$2,000 but less than \$2,500 would be raised to \$22.50 per week, and the maximum for complete unemployment of those who earned at least \$2,500 would be raised to \$25 per week. The rate of benefits for all others

remains unchanged. The Social Security Board agrees that the maximum benefits under the unemployment-insurance laws should be raised to at least \$25 per week.

Under the law as it now stands, the maximum duration of unemployment benefits is 100 compensable days. This comes to 20 weeks. The bill would extend the maximum to 130 compensable days, or 26 weeks. Only a small percentage of persons who become unemployed ever receive benefits for the maximum duration, and so this change helps only that small percentage who suffer the heaviest unemployment. A large number of States already have a maximum duration in excess of 20 weeks, and several have already provided a 26-week maximum duration. The Social Security Board has recommended to us that the maximum duration of benefits under the unemployment-insurance laws should be increased to at least 26 weeks. There can be no reason why the railroad system, so long as it can afford to be more liberal without any increase in the taxes, should have a shorter maximum duration than the more favorable State laws provide.

Our experience with unemployment insurance in the railroad field shows beyond any dispute that all these changes can be amply afforded without any increase in the tax rate. But the argument has been advanced that instead of trying to make the benefits less inadequate and trying to bring them up to something that would really approach unemployment insurance—that is, something that would really resemble insurance against unemployment—we should keep the old, inadequate benefits and return what is left to the railroads by reducing their unemployment insurance taxes. I should like to discuss that suggestion a little.

As I have already stated, when we started unemployment insurance we thought 3 percent of pay roll an appropriate amount to devote to unemployment insurance. Benefits were made so scanty and payment of them hedged with so many artificial limitations and restrictions, because under conditions as we could see them then we were afraid that that rate of tax would not support anything like substantial benefits. To encourage employers to try to stabilize their employment and reduce their turn-over of employees, a plan of so-called merit rating was proposed and finally authorized in the Social Security Act for the State unemployment insurance laws. Under this scheme, taxes paid by an employer are credited to his account, and unemployment benefits paid to his employees are charged to his account. When the amount in his account reaches a certain percentage of his pay roll, his unemployment tax rate is reduced.

There was considerable controversy about this. Its opponents pointed out that the factors and circumstances that cause unemployment had very little to do with what the employer wanted to do or could do, and so had very little and probably nothing to do with the employer's merit. This has already been recognized at least in part, and the plan is no longer referred to as "merit rating" but is now called "experience rating."

That the facts on which an employer's tax rate might increase or decrease have nothing to do with his ability or desire to stabilize employment, or his merit, is shown by the possibility that a very large turn-over and an artificially unstable labor force could also result in tax reduction. This is so because by employing men for a period just too short for them to qualify for unemployment benefits, and then replacing them with another group for a like period, the employer's record would also be very good on the books, for very little if any benefits would be paid on the basis of employment with him, and he would receive the benefit of so-called merit rating although his performance would be the opposite of the desired basis of merit rating.

It was suggested also that merit rating was but an opening for a general unemployment tax reduction below the accepted 3 percent and would be used to prevent the furnishing of more adequate benefits if experience should prove that the tax could support more adequate benefits. The proponents of such plan answered that merit rating provisions could never form the basis of a general unemployment tax reduction, for there would always be enough unemployment to assure that most employers would be paying the full 3 percent.

Finally, those opposed to merit rating pointed out that it raised and lowered taxes at the most inopportune times. When an employer would be employing all his men without lay-offs, and would be prosperous and making a lot of money, his tax rate would be reduced just when he could afford to pay the highest taxes to take care of future unemployment. On the other hand, when business would be bad, and the employer would be compelled to lay off his employees, when his profits would be shrinking or would have disappeared, then his taxes would increase, just when he could least afford an increase. I ask Senators if that is not exactly what I proposed under the amendment offered by the distinguished Senator from New Jersey? It was observed that under none of the other unemployment insurance systems anywhere in the world, some of them having been in operation many years, was experience rating recognized.

The fears and forecasts of those who criticized experience rating have now been realized, and the arguments of those who favored it have proven unsound. Prosperity and full employment, during and preceding the war, have produced large pay rolls through no merit of the employers. The simple force of economic factors far beyond the control of any employer has resulted in his taxes being reduced in those States which have experience rating. Now, when his profits are far higher than they were during the early years of unemployment insurance of this country, he is subject to a lower tax rate for unemployment.

The PRESIDING OFFICER. The time of the Senator on the amendment has expired.

Mr. MURDOCK. I will take 15 minutes on the bill, Mr. President.

Should conditions deteriorate and profits dwindle, with unemployment on

the increase and unemployment benefits paid in larger sums, his unemployment tax rate will increase just when he can least afford it, and when it will produce the least revenue. That is what the Hawkes amendment would provide.

Despite the argument of the proponents of experience rating that it could never form the basis of a general unemployment tax reduction, that is just what has happened. With full employment for the last few years, most employers in States embodying experience rating in their laws are paying less than the full rate. The most glaring example of the tendency of experience rating to encourage a circumvention of its ostensible justification and to furnish an excuse for unwarranted tax reduction, is the move of the employers in this instance. We refused to adopt experience rating when we enacted the Railroad Unemployment Insurance Act. Remember that benefits were set as low as they were to keep costs within the 3-percent tax rate, and numerous irrelevant restrictions and exclusions were embodied for the same purpose. Now we see large sums accumulating in the reserve and we see that a liberalization can be made without any danger of insolvency. Yet the employers resist all liberalization and argue and propose that instead of bringing the benefits up to what the tax can support, the tax be brought down to the level that will support the present artificially meager benefits. It could hardly be more apparent that we were right when we omitted experience rating from this law and when we rejected an earlier movement to interject it.

The fund is now highly solvent and it is undisputed that the present tax can support less niggardly benefits. It is our duty to see that the monies collected for unemployment be devoted to the benefit of those for whose protection we collected them. There can be no sound reason for our not doing so.

Mr. LANGER. Mr. President, will the Senator yield?

Mr. MURDOCK. I yield.

Mr. LANGER. I ask the distinguished Senator if it is not true that only a short time ago the Women's Bureau of the Department of Labor, when the matter of the last Federal pay bill came up, said that the women employees of the Federal Government who had been married a year should have at least 90 days of leave without pay.

Mr. MURDOCK. I am advised that that is correct.

Mr. LANGER. How many men and women are affected by this bill?

Mr. MURDOCK. I do not believe I can give the Senator the answer. I am sure the Senator from Colorado [Mr. JOHNSON] or the Senator from Montana [Mr. WHEELER] have those figures, but not being a member of the committee, and not having attended the hearings, I do not have the figures.

Mr. LANGER. Is it not one of the tactics of the opposition, of those who are opposed to unemployment insurance, whenever any measure of this nature is brought up on the floor of the Senate, to say "Well, that affects but a small group and is setting a precedent which other

The SPEAKER. Is there objection to the request of the gentleman from Texas?

There was no objection.

(For conference report and statement, see proceedings of the House of July 25, 1946.)

CALL OF THE HOUSE

Mr. THOMAS of New Jersey. Mr. Speaker, I make the point of order that a quorum is not present.

The SPEAKER. Evidently no quorum is present.

Mr. MCCORMACK. I move a call of the House.

A call of the House was ordered.

The Clerk called the roll, and the following Members failed to answer to their names:

[Roll No. 238]

Adams	Delaney,	Mansfield, Tex.
Allen, Ill.	John J.	Marrow
Allen, La.	Earthman	Miller, Calif.
Almond	Eaton	Morrison
Anderson, Calif.	Elston	Norton
Andrews, N. Y.	Engel, Mich.	O'Konski
Bailey	Fellows	Patrick
Baldwin, Md.	Gary	Peterson, Ga.
Baldwin, N. Y.	Gathings	Pfelfer
Barry	Gillespie	Powell
Bates, Ky.	Gossett	Priest
Bates, Mass.	Halleck	Rayfiel
Beckworth	Hand	Reece, Tenn.
Bell	Hare	Rees, Kans.
Bender	Hart	Robertson, Va.
Bennet, N. Y.	Hébert	Robinson, Utah
Bland	Hefferman	Robison, Ky.
Boren	Hendricks	Rockwell
Boykin	Hess	Roe, N. Y.
Bradley, Mich.	Hill	Russell
Brooks	Hollifield	Ryter
Bryson	Izac	Sadowski
Buckley	Jennings	Shafer
Buffett	Johnson, Ill.	Sheridan
Bunker	Johnson, Okla.	Short
Butler	Johnson, Tex.	Simpson, Pa.
Cannon, Mo.	Keefe	Slaughter
Carlson	Kefauver	Somers, N. Y.
Chenoweth	Keogh	Sparkman
Clements	Kerr	Starkey
Clippinger	Kilburn	Stewart
Cochran	Kilday	Stockman
Coffee	Landis	Tolan
Cole, Kans.	Latham	Torrens
Combs	Ludlow	Wasielewski
Cooper	McGehee	Weaver
Courtney	McKenzie	Welch
Cox	Mc Millan, S. C.	Welch
Cravens	Mahon	West
Crawford	Maloney	Wickersham
Curley	Mankin	Winter
Daughton, Va.	Mansfield,	Wolfenden, Pa.
Dawson	Mont.	Wood

The SPEAKER pro tempore (Mr. SHEPPARD). On this roll call 304 Members have answered to their names, a quorum.

By unanimous consent, further proceedings under the call were dispensed with.

CORRECTION OF THE RECORD

Mr. MURRAY of Wisconsin. Mr. Speaker, I ask unanimous consent to correct some words in a speech I made on July 22, and to add a few clarifying sentences.

The SPEAKER. Is there objection to the request of the gentleman from Wisconsin [Mr. MURRAY]?

There was no objection.

ATOMIC ENERGY ACT OF 1946

The SPEAKER. The gentleman from Texas [Mr. THOMAS] is recognized.

Mr. THOMAS. Mr. Speaker, in my judgment your conferees have brought back to you a very splendid report. It bears the signature of all of the Senators and of all the House conferees ex-

cept my distinguished friend the gentleman from New Jersey [Mr. THOMAS].

The conference was in session for the greater part of 3 days and every section of both the Senate and the House bills was given very careful and I may say judicious consideration. I think it is the almost unanimous opinion of the conferees that the subject is so big and so important that legislation, provided it is reasonable in its terms, is absolutely necessary, in view of our national and international situation.

It should not be forgotten that the President urged some legislation on this subject just as soon as possible. It should not be forgotten that the Secretary of State urged action in view of our proposed international agreements. It is my opinion that there must be some solution to the domestic control of atomic energy before we can move into the international field.

What I shall say will be very brief, and then I will yield to members of the committee who desire time. To get right down to the report, I may say that with the exception of two big questions, the Senate receded on practically every amendment. If you will look at the report you will find amendment after amendment, which was adopted by the House, readily accepted by the Senate conferees.

I may say that the conferees on the part of the Senate, composed of the Senator from Connecticut [Mr. McMAHON], the Senator from Michigan [Mr. VANDENBERG], the very able and, in my judgment after hearing him, the great lawyer, the Senator from Colorado [Mr. MILLIKIN], the Senator from Colorado [Mr. JOHNSON], and the Senator from Georgia [Mr. RUSSELL], had the same objective as all of us, and that is to do something to get this fissionable material that we hear so much about, and the things that go into making not only atomic bombs but the things we hope will go into peacetime articles under control in this country just as soon as possible. Congress in all its history never had to deal with a more important problem. About it hinges the question of war or peace, and also the matter of destruction or survival. If put to proper and peacetime use, atomic energy, I predict, will become the greatest boon to humanity in all history.

Mr. ARENDS. Mr. Speaker, will the gentleman yield?

Mr. THOMAS. I yield.

Mr. ARENDS. Is it not true that on two major provisions in this bill the House receded to the Senate? One was having a military man on the Commission, the other was the patents provision.

Mr. THOMAS. I will explain that as fully as I can. The first one, of course, is this very controversial question as to whether or not anybody from the armed forces should be on the Commission proper. It will be recalled that the amendment that was adopted in the House provided that there must be at least one, and that two were permissible. If you will recall, a little later in the same military section of the bill there is a provision that the Director of Military Application should be a member of the armed forces. That amendment was

offered in the House and adopted by the Senate.

The compromise—and that is why we have conference committees—was that the Senate was willing to accept the amendment that the Director of Military Application, the man who is going to make the bombs if any are to be made, or to put atomic energy to military purposes if that is to be done, should be a member of the armed forces. That, as I tried to say the other day, I think is in keeping with our tradition, because the Director of Military Application is not going to be a policy maker. The Senate stood firm, however, and opposed, as did three of the House conferees, that there should be an Army or Navy man on this policy-making committee, the Commission itself. There would be just as good argument to have a general Secretary of War or an admiral as Secretary of the Navy, or that the man in the White House is not to be a civilian, because that has been the policy of our Government from the beginning.

And I might say in this connection that after we met last evening on the report and after it was drafted and put into final form, in order to make assurance doubly sure and to bring some kind of definite information back to this House, I had this report submitted early this morning to none other than the Chief of Staff, General Eisenhower, and asked him to read it over and give me his frank opinion so I would have it for my own satisfaction and to transmit to you if you were interested. About 2 hours after I had submitted the report General Eisenhower called me in person over the phone and told me what he had already told Senator VANDENBERG, and that was that the Army did not want a member of the armed forces on the Commission; and that in view of the Vandenberg amendment he and the War Department were entirely satisfied with the conclusions reached by the conferees and he hoped for the adoption of the conference report. So now the Director of Military Application remains an Army officer and the Vandenberg amendment provides that any representative of the War or Navy Departments, even the Chief of Staff, the Secretary of War, or the Secretary of the Navy or any military persons whom they delegate, shall attend the sessions of the Commission and keep in close touch and be fully informed of everything that goes on in the sessions of the Commission and if they are not satisfied they file their protests with the Secretary of War and the Secretary of the Navy. If they are still dissatisfied they appeal to the Commander in Chief of the United States Army, who is none other than the President. You have got to trust somebody, and all of us have confidence in the honesty and patriotism of these high officials.

I only wish I had the ability and facility of expression so that I could repeat to you the argument Senator VANDENBERG made in support of this report. He said in view of the military liaison amendment that he had insisted on he felt this arrangement was the best that could possibly be worked out, not only to protect the secrecy of the bomb but also to give us the best national security. I

might also add that it was his statement that in the beginning of the consideration of this legislation he stood firm that the armed forces must be represented. I would like for you to look at the personnel of that committee again. I just do not believe you could have a greater committee appointed to consider a matter of this great importance than the Members that constituted the special Atomic Energy Committee, because there were men on it like Senator McMAHON, Senator MILLIKIN, and Senator VANDENBERG. There was also Senator HART, formerly an admiral in the Navy for many years and with a distinguished record. After 5 months of hearings, comprising four printed volumes and the examination of 110 of the outstanding scientists, military men and industrialists of this Nation that committee unanimously reached the conclusion that it did on this important legislation.

Mr. DONDERO. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Michigan.

Mr. DONDERO. What was done by the conferees in regard to the amendment which provided for screening by the Federal Bureau of Investigation of the personnel?

Mr. THOMASON. I will come to that.

Before we get down to the last and perhaps the biggest controversial issue left in the bill, may I say that after we compromised this issue on whether it was necessary to have a member of the armed forces on the Commission, which is purely a civilian affair, we did provide that there must be a member of the armed forces as director of military application. We then got down to such problems as mentioned by the gentleman from Michigan regarding investigation of all these men by the FBI.

A careful analysis of the report will disclose that the House amendment is still in the bill substantially in the same form it left the House except for one thing. The FBI screens all of these employees, especially those having to do with what might be termed the secrets and those having anything to do with critical material, but the FBI does not do the certifying. The unanimous conclusion of the conferees, I think, was that while the FBI does a very splendid and valuable work in matters of investigation and things of that sort, yet we do not want to set the Bureau up as a kind of employment agency where they have to certify employees. However, you will find in the report where there must be a full and complete investigation by the FBI and they, in turn, submit the facts to the Commission. The conferees thought, therefore, that if the FBI furnishes the facts to the Commission that would be sufficient and, of course, we must assume that the President is going to appoint some outstanding men on this Commission. He must accompany their nominations with their qualifications to the Senate before confirmation. We direct that FBI must investigate, but we do not give them the authority to certify the names of the people who should be employed.

Another thing in that same connection, is this matter of the death penalty.

That, like the FBI amendment, is substantially retained in the report, except the committee thought just as a matter of justice and also in trying to be practical that where you impose the death penalty it should only apply to men who have disclosed secrets to foreign enemies or foreign governments, or betrayed their country, and that the death penalty should only be imposed by a jury. Otherwise the death-penalty provision is retained in there in substantially the same form as it left the House.

In conclusion, let me make brief reference to the last and perhaps most controversial issue in the report, the matter of patents. That is a big subject in itself. Frankly, I share the views of a great many men in this House, especially my distinguished colleague from Texas [Mr. LANHAM] in saying that I do not want the Government in private business. I have great respect for our present patent laws. I want to encourage individual enterprise and inventive genius. Nevertheless, we are dealing here with a very unusual situation, we are dealing with a very grave and dangerous instrumentality that might mean the life or death of the human race. There was never anything like it in history. The Government has spent \$3,000,000,000 to develop atomic energy. It belongs to Uncle Sam. It is in its very nature a monopoly. It has to be kept that way, at least for a time, if we are to keep the secret. There is no use for the Government to take over all fissionable material if we do not also have all the patents to process this dangerous element.

I want to be frank with you as relates to this whole report. Every member had one big objective and that was to tie up the secret of the atomic bomb. You cannot do it without also controlling all patents. Perhaps those restrictions can be lifted later, but this is certainly no time to take a chance. Because these patents have to do with all fissionable material wherever it is. I think, perhaps, with one exception, it was the opinion of the conferees that for the time being, at least until we know what we are going to do with this terrible weapon and this tremendous secret discovery, that there is nothing in the world to do except to give the Government the monopoly that it must have. But in that connection let me say that whenever it takes over an existing patent or does anything else in connection with existing patents or inventions that are later discovered, they must make adequate compensation for the taking of it and also pay a royalty. So, nobody, whose principal interest is in connection with this bomb, can find any fault about that until we settle down and determine what is the best thing for our country and for the peace of the world.

Mr. KUNKEL. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Pennsylvania.

Mr. KUNKEL. Then you have adopted practically in identical form the Senate amendment on patents?

Mr. THOMASON. That is correct.

Mr. KUNKEL. There are no material changes in it at all?

Mr. THOMASON. That is correct.

Mr. SUMNERS of Texas. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Texas.

Mr. SUMNERS of Texas. Do I understand the gentleman to say that when we come to deal with patents and the necessity to protect the secrecy in regard to the bomb, that you let the patents suffer, if I may put it that way, rather than take a chance on revealing the secrets of the bomb?

Mr. THOMASON. The gentleman is exactly right. This is something that we cannot gamble with or take the slightest chance. The secret at present is the important thing. When a man thinks he has an invention, he has to file his application down here in the Patent Office, and that becomes not only known to every Tom, Dick, and Harry who wants to look at it, but any citizen who wants to go down to the Patent Office can look at the application.

As the Senator from Colorado [Mr. MILLIKIN] so ably pointed out, you just cannot take a chance with a thing like this. We are dealing with the most terrible device that has ever been discovered in the history of mankind.

Mr. HINSHAW. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from California.

Mr. HINSHAW. If the Lanham amendment had not been agreed to in the House, I had a provision to add to section 3 of the patent provision which related to inventions and discoveries that had not been patented, but must be turned over to the Commission within 60 days and provide that just compensation should be made for turning over the information, but we did not reach that point.

I would like to know, if a man makes an invention or discovery for which no patent application is made, how you can pay compensation under that section by turning it over to the Commission?

Mr. THOMASON. The Commission itself is authorized to make fair and just compensation.

Mr. HINSHAW. You will find under section 3 that no such language was contained, and it was covered in the first two sections relating to patents.

Mr. THOMASON. I cannot answer that technical question.

Mr. CHELF. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Kentucky.

Mr. CHELF. I might say to the gentleman that the bulk of the patent laws that we are now operating under were enacted back in 1870.

If we were dealing with just an ordinary thing and this were just a normal situation there would be much force, I think, to the argument that has been made that we should not invade the present patent law field, but I need not tell the Members of this House, in view of what happened at Bikini the other day and what happened at Hiroshima, what this means to the peace of the world. It was the opinion, I think, of the conferees, I know it was of most of us, that it is something you cannot trifle with at

present. This bill does set up a monopoly. It has to be. If you are going to take over all the fissionable material in the United States, which you do in the bill, certainly you are going to have to take over for the time being every thing connected with it including patents.

Mr. SUMNERS of Texas. I am afraid the gentleman misunderstood me. My point was that in dealing with the patents and in protecting the secret you go to the side of protecting the secret. You do not take a chance on letting the secret get loose in order to give some fellow a patent.

Mr. THOMASON. My friend from Texas is absolutely right. Patents and everything else must be subordinated to keeping our great secret. In view of what is going on in some parts of the world today, I am not willing to take the slightest chance. We have tried to tie this thing up with the strongest language that can be written.

Mr. SUMNERS of Texas. Of course.

Mr. THOMASON. Congress is going to be in session after this law goes into effect and after we have, perhaps, an international atomic commission of some sort that will put this thing to peaceful purposes rather than to destructive purposes, so then there will be time to make changes if necessary. But it is the opinion, I think, of everybody on the com- or nearly so, that for the present we cannot do any gambling.

Mr. COLMER. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from Mississippi.

Mr. COLMER. As I understand, under the House bill the appointment of a military representative was compulsory, but under the conference report that would be optional.

Mr. THOMASON. No. I do not want to mislead the gentleman as to the Commission. They will all be civilians, with a military liaison committee sitting in session with them. However, the only member of the armed forces proper who will be in the organization will be the Director of Military Application.

Mr. COLMER. Under the House version of the bill, was not provision made for a military representative?

Mr. THOMASON. Yes.

Mr. COLMER. But that has been changed?

Mr. THOMASON. It was made compulsory that there should be one member of the armed forces, and it was permissive to have two.

Mr. COLMER. Would not the gentleman think the armed forces should be represented on this Commission?

Mr. THOMASON. No; I do not think so, and General Eisenhower does not think so, and Secretary Patterson does not think so, and Secretary Forrestal does not think so. In view of the existence of the military liaison committee, Secretary Patterson and the Under Secretary of the Navy testified before our committee that they felt there was ample and full protection under the Vandenberg amendment, which was the basis on which the Senator from Michigan changed from the position the gentleman from Mississippi now has and offered the

liaison committee amendment, which is now part of the conference report.

Mr. COLMER. Of course, I differ with that.

Mr. COOLEY. Mr. Speaker, will the gentleman yield?

Mr. THOMASON. I yield to the gentleman from North Carolina.

Mr. COOLEY. When the gentleman addressed the House recently on this proposition, he seemed to emphasize the necessity and desirability of developing atomic energy for industrial or peaceful purposes. I compliment the gentleman on emphasizing today the necessity for secrecy. Does the gentleman now think that under the bill that has been agreed upon by the conferees the secret is being just as carefully guarded as it possibly can be?

Mr. THOMASON. I will be frank with my friend from North Carolina. I think the bill is stronger than it was when it left the House insofar as the guarding of the secret of the atomic bomb is concerned, because, under the section relating to giving information to other countries, that can only be done after the Congress by a joint resolution has said that all safeguards have been invoked that are necessary for the guarding of the atomic bomb as a military weapon.

Another reason why I am now fully convinced that for the present the Government must control the patents on all matters affecting atomic energy is this. Let me call my friend's attention to this statement, and I hope he will read all of it, that as to this monopoly on patents the law uses the word "solely." No other patents of any kind are touched or in any way affected. It cannot invade any other field. It has to do solely with the atomic energy problem itself and the atomic bomb.

Mr. COOLEY. I have no objection to the monopoly features of the bill. I have no objection to the Government having a monopoly on all the patents. The thing that I am most interested in is that we should agree to keep this secret at the present time.

Mr. THOMASON. I think the bill as reported back to the House is just as strong as it can be. I think it is a splendid report. I hope for its adoption.

Mr. Speaker, I yield 5 minutes to the gentleman from Massachusetts [Mr. CLASON].

Mr. CLASON. Mr. Speaker, as one of the conferees on the McMahon atomic energy bill I can say that the matters which were in dispute were thoroughly discussed by the conferees. We had some very strong arguments on the different amendments which were under discussion. The two main amendments, of course, were those which had to do with whether or not a military man should be placed upon the commission, and the one dealing with patent law, although there were disputes on other amendments adopted by the House. Further than that, I think I should say that the position of the conferees was not unanimous on any of the important amendments which were in dispute. Nevertheless, I think we have brought back a very fine conference report. I say

that because General Eisenhower, Secretary Forrestal, and Secretary Patterson all indicated that they felt even if the bill had not had as much protection in it and had not had the provisions in it which the conferees have finally brought back to you, they still would have felt and believed that the bill ought to be adopted and that they were satisfied with it. The question of whether or not there should be a military man upon the commission was covered under amendments 1, 2, and 3. The first one, as you probably will recall, had directly to do with whether or not a military man should be appointed to the commission; the second one had to do with the question of the director of military application, and the third had to do with the law which would permit at least one and not more than two military men to qualify to serve on the commission at the same time. In connection with that, we had considerable argument. I have been delighted today to hear the distinguished gentleman from Texas quote so often from the two distinguished Republican Senators on the conference committee. I almost gain the impression that if either one of them were nominated for president he would be assured a large Democratic following. They certainly got it in the conference. I have no doubt they deserved it. It is my opinion we are fully protected so far as the military is concerned even though there may not be military men on the commission itself. We have the military liaison committee which General Eisenhower stated was all he felt was necessary in order for the armed services to be fully protected in connection with atomic research in the future. However, the House added the amendment which did put the director of military application directly into the armed services—he must be a member of the armed services. That being so, we have a much closer and much more important connection with atomic research in the future. Therefore, I feel even though the House did not get all they would like to have had under the amendments 1, 2, and 3, they did obtain a big advantage over the original Senate bill. I feel that the Army and Navy are fully protected, while we have established civilian control of our national policy on atomic energy.

So far as the patent laws are concerned, the conferees called in the distinguished gentleman from Texas [Mr. LANHAM], who explained fully to them the difference between the patent sections of the Senate bill and the House bill. Many of the members of the conference committee are lawyers and each of them had his own idea of what was meant in the Senate and House versions. On a divided vote the majority of the conferees of each House voted for the provisions of the Senate bill. If they prove inadequate for our national protection, I am sure the commission will request such changes as are necessary.

This conference report will be of great value in two important avenues: First, it will aid our representatives in the United Nations and in any peace conference to secure international cooperation and lasting peace; second, it will es-

establish a much needed organization to facilitate research and development of atomic energy, not only for military purposes, but for medical, domestic, municipal and industrial purposes. I urge that the conference report be adopted.

The question came right down to the proposition, Did the McMahon bill provide as much protection as was necessary and was actually needed in order to prevent dissemination of knowledge in regard to atomic energy, which we ought to have to protect our people? We have the know-how, we have the inventions and the patents. Should they be protected to the extent of the provisions of the McMahon bill?

The SPEAKER. The time of the gentleman from Massachusetts [Mr. CLASON] has expired.

Mr. THOMASON. Mr. Speaker, I yield the gentleman two additional minutes.

Mr. CLASON. As I see it, it came down to the question of whether or not we receive more protection for the United States under the McMahon version or under the Lanham version. I do not think it is proper for a conferee to state how he stood on any one thing, but there was not a unanimous vote on the particular amendment. However, a majority did decide that they preferred the McMahon provision to the Lanham provision. When the conference report was finally drawn, even though I personally did not agree with some of the provisions, I feel strongly it is necessary to have legislation on this subject at this time, and I therefore signed the report. I feel that the conference report added to the legislation which was before you and has resulted in satisfactory legislation and very valuable legislation. I will vote for the conference report, and I hope the rest of you will see it as I see it. I know you will be in disagreement on certain amendments, but on the whole we have good legislation. Otherwise we will not get the benefits for domestic purposes and for industry from atomic energy which we are entitled to obtain.

The SPEAKER. The time of the gentleman from Massachusetts has again expired.

(Mr. CLASON asked and was given permission to revise and extend his remarks.)

Mr. THOMASON. Mr. Speaker, I yield 5 minutes to the gentleman from North Carolina [Mr. DURHAM].

Mr. DURHAM. Mr. Speaker, it has been well explained to you what the conferees did. I think we brought out a good conference report.

My position on this matter is pretty well known with regard to the military men on the Commission. I supported the Lanham amendment when it was on the floor of the House. After hearing the discussion on this matter when the conferees got together on it, I feel that the Senate amendment is more workable and is a far better amendment than the amendment that was adopted in the House.

There has been a little confusion spread around the House in regard to fissionable material. The rumor has been spread that it exists in practically everything. Steel is said to be fission-

able material. I am not an authority on fissionable material, but I have had some chemistry, and I have some knowledge of it. We feel that we are at the present primarily dealing with only uranium and thorium to produce this fissionable material and nuclear fission for this atomic weapon.

Looking at this patent provision, which is section 11 and applies solely to fissionable material, that is what we are trying to apply this patent provision to. If we are going to control all of that material, as this bill does, we are going to have something like a man who has a book of blank checks in his pocket and no money in the bank, if he goes down here and secures patents, because he has no material unless he secures it from the Government. Therefore, his patent becomes useless.

Furthermore, these men who have been serving at Oak Ridge and other plants of the Manhattan project will be free when they are discharged or released from that plant. Those people are ambitious, they will apply for patents on what they have already done. I therefore feel that we cannot open this thing up to everybody.

What are the principal differences between Senate section 11 and the so-called Lanham amendment?

The Senate patent provisions differ from the House provisions in five major respects:

First. The Senate makes patents on the production of fissionable material and on atomic weapons nonpatentable; the House permits private patents. Private patent rights in these two fields are inconsistent with the national security because patent litigation and procedures may well result in disclosure of secrets. It would be a risk that one or two companies would control all patents affecting these vital national defenses activities.

Second. The Senate bill requires that all new inventions relating to the production of fissionable material be reported to the Commission. The House bill contains no such provisions.

Third. The Senate bill automatically authorizes the use of any patent in atomic-energy research. The House, in omitting this provision, may hamper atomic research by refusal of patentees to license their patents for research.

Fourth. The Senate requires that the patentee license at a reasonable royalty the use of any nonmilitary device of importance to the economy. The House, in omitting this provision permits, for example, one patent holder to take over the entire power industry through control of any atomic-power patents.

Fifth. The Senate bill gives the Commission full authority to condemn all atomic-energy patents, including production of fissionable material, utilization devices, research, and atomic weapons. The House bill confines the condemnation power to patents affecting the national defense.

We must go all the way if we are going to have control of this dreadful weapon.

If this provision, section 11, in any way hinders or affects the further development of our great industrial and

private enterprise system, I will be one of the first to advocate doing away with it, but I do feel for the present we cannot take a chance and hope the House will accept the conference report.

(Mr. DURHAM asked and was given permission to revise and extend his remarks.)

Mr. THOMASON. Mr. Speaker, I yield 8 minutes to the gentleman from New Jersey [Mr. THOMAS].

Mr. THOMAS of New Jersey. Mr. Speaker, as one of the conferees, I did not sign the report on S. 1717, and I did not because I felt that the House was giving up too much, that this conference report was nothing more than a skim-milk version of the bill that passed in the House; further, the House conferees won all the skirmishes and the Senate conferees won all the big battles, and the two largest battles were: One, whether or not the military would have representation on the Commission; and two, whether or not we were going to take the House version of the patent provision.

Mr. ARENDS. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield.

Mr. ARENDS. Would the gentleman say then that the conferees on the part of the House capitulated completely to the Senate in those two major items?

Mr. THOMAS of New Jersey. I do not like to criticize my good colleagues on either the Democratic side or the Republican side, but I will say that the House conferees did not carry out the version of the House on those two questions.

A great deal has been said about security, that this bill will give us more security than we had in the bill that we passed in the House. I just want to paint this picture. Just as soon as this bill is enacted into law and as soon as the Army engineers have had a reasonable time to get out of Oak Ridge they will get out of there to a man. There will be no more Army Intelligence or Army engineers in Oak Ridge. Then we are going to turn the plant and its secrets over to whom? We are going to turn them over to a lot of persons, and I will admit that in time they will be investigated by the FBI, but we are going to turn Oak Ridge over to a lot of persons who may have had no experience in security. Some of them will be political patronage. Those are the people who are going to guard the atom bomb secrets down there in Oak Ridge.

That is the reason why I say that under the provisions of S. 1717 where we turn everything over to civilian control we may be taking steps that will do the very thing that a potential aggressor or a potential enemy of this country would want us to do, and that is to open the door to the secrets that are so necessary to guard at this time particularly.

Mr. HARNESS of Indiana. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield to the gentleman from Indiana.

Mr. HARNESS of Indiana. When the conferees accepted the Senate version of the patent feature they accepted what the Socialists have been trying to do for the last half century?

Mr. THOMAS of New Jersey. No doubt about that.

Mr. HARNESS of Indiana. Completely socializing our patent system in this Nation.

Mr. THOMAS of New Jersey. There is no question about that.

Mr. HARNESS of Indiana. When they refused to permit the War Department, the Army, or the military to have one single representative out of five they assured the possibility of giving away the secrets if any may be left in connection with this bomb?

Mr. THOMAS of New Jersey. Yes.

Mr. CURTIS. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield to the gentleman from Nebraska.

Mr. CURTIS. I favor the position of the gentleman in regard to both the patent feature and the military control. This conference report should be turned down. There is no more reason to take the Army out of the atomic bomb business than to take it out of aviation, artillery, or any other branch of our defense.

Mr. THOMAS of New Jersey. Mr. Chairman, it was said in conference that the reason we should not have an Army man as one of the commissioners is because it might be considered as a military veto and, in addition, that we were overemphasizing the military. These remarks were made by one of the distinguished gentlemen whom our colleague from Texas referred to and I am sure he is going to vote for him when he runs for President of the United States. I would like to know how anybody could consider that by placing one Army man on a commission of five it would be a military veto. I would like to know how it could be construed by any nation in the world that we were overemphasizing the military.

The reason that we want a military man on there is so that he will be in every conference, so that he will know absolutely what is going on, so that he will be just as close to the picture as possible. When we exclude the military we make them outcasts, something that we are a little ashamed of. I think it is just plain ridiculousness.

Mr. REED of New York. Mr. Speaker, will the gentleman yield?

Mr. THOMAS of New Jersey. I yield to the gentleman from New York.

Mr. REED of New York. I ran across something that startled me early in the war. An Army officer came to my office and he said, "I am somewhat distressed. I do not care to go to the higher-ups, but I know you, and I am going to talk to you." He said, "Every single day my men are getting Communist literature under the frank of the Patent Office." I have watched this thing very closely, and when I saw this patent provision in here I could quickly understand why it was in there.

Mr. THOMAS of New Jersey. I want to say just a word about the patent feature. We House conferees did not have a chance. The cards were stacked against us from the beginning. There was never any time when we thought we were going to gain our objectives.

I think that the thing that amazed me

more about the conference we had in regard to patents was this, that it was admitted, by not one conferee but by more than one, that the Senate sections on patents would do this thing above everything else, and that is, bring about a compulsory monopoly, and for the first time in the history of the United States we are now called upon to have a compulsory industrial monopoly. Yet, all of the authorities in the United States on patents tell us that the Lanham features, the sections put in by the House bill, would not only protect the Atomic Energy Commission and protect the United States when it came to the question of atomic energy and the making of the atomic bomb, but would protect the industry of the United States as well.

I disagree with my colleague from Connecticut that the Senate version on patents would benefit private business. I think under the Senate version of patents, private business, whether it had anything to do with atomic energy or not, would be absolutely stifled; it would never get started, and if these features had been in existence some 50 or 75 years ago we would not have the industrial life in America that we enjoy today.

Mr. Speaker, after hearing all the debate in Committee and on the floor of the House and in conference, I am still resolved to oppose this legislation. I think it the most dangerous we have ever considered—likewise the most important. For the safety of 135,000,000 of Americans we should delay further consideration until we have had more time for study. The stakes are too high in the gamble we are taking today.

(Mr. THOMAS of New Jersey asked and was given permission to revise and extend his remarks.)

Mr. THOMASON. Mr. Speaker, I yield 5 minutes to the gentleman from Texas [Mr. LANHAM].

Mr. LANHAM. Mr. Speaker, in my judgment this conference report involves most unfortunate legislation, and I certainly shall oppose it.

We have all seen the gradual growth of centralization of power in Washington, depriving the people of their rights and leading them to neglect their responsibilities, and now we see a blow at the fundamental basis of our progress in our patent system.

Here we have the recommendations of the Committee on Military Affairs with reference to patents. Those recommendations, from the standpoint of knowledge or familiarity, might as well have come from the Committee on Claims or the Committee on the District of Columbia.

The small businessmen of this country, the American Bar Association, and the gentleman from the Navy Department who has been from the beginning the adviser with reference to atomic energy on patent matters have all approved this House provision. We voted for it overwhelmingly in this body, and the conferees have not even shown us the courtesy of bringing it back in disagreement in order that we might express our views again.

I wonder if we are beginning to sacrifice and surrender our American way of life to appease those in this country and

abroad who have no fondness for our governmental philosophy and principles. What will happen if you support these patent provisions in the conference report? There will be no incentive, outside of those connected with this Commission itself, to stimulate the inventive genius of America to undertake to give us discoveries that will be helpful with reference to atomic energy. Let me bring to your attention the fact that patents, wonderful inventions for our progress, come in the main not from the Government, but from the rank and file who make their research far from Washington, and unless we protect them, unless we get rid of this compulsory licensing which is going to turn our patent system over to an unknown commission, we may undermine and destroy this fundamental basis of our progress and also the initiative and the incentive of the American inventor.

Mr. HARNESS of Indiana. Mr. Speaker, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Indiana.

Mr. HARNESS of Indiana. Under this conference report, and under the Senate bill the way it passed the House, the Commission will be the arbitrary and sole judge of what patents are connected with the development of atomic energy.

Mr. LANHAM. Absolutely.

Mr. HARNESS of Indiana. And any invention that might remotely have any connection with atomic energy will be under the control of this Commission.

Mr. LANHAM. And consequently the inventors are not going to try to invent things that will be helpful in reference to atomic energy. There will be no incentive to do it.

Let me call your attention to the fact that the House provision gives the Commission authority to get any invention, any patent, or any application for a patent, that it can use in carrying out its purposes. Why go beyond that to take away property rights from the citizens of this country, to revoke their property rights, and to assure them that they can have no further rights in their property, because you are confiscating and taking the property of the individuals when you undermine and abolish the patent system of this Nation of ours?

Mr. CHURCH. Mr. Speaker, will the gentleman yield?

Mr. LANHAM. I yield to the gentleman from Illinois.

Mr. CHURCH. If the Lanham amendment were left in the bill, does the gentleman feel the secrecy or the know-how would be endangered in any way?

Mr. LANHAM. Not in the least. As a matter of fact, it would be protected. I think this whole legislation is a bit premature, and we are likely to take steps that will menace our security if we enact legislation of this kind in advance of the agreement with reference to peace treaties and the establishment of peace in the world.

Mr. THOMASON. Mr. Speaker, I yield 5 minutes to the gentleman from Connecticut [Mrs. LUCE].

(Mrs. LUCE asked and was given permission to revise and extend her remarks.)

Mrs. LUCE. Mr. Speaker, the conference report seems to be about the best legislation we are likely to get for this vital problem. It was often noted during the debate in this House that, while this bill may open the front door to merciful peace and international and national security, it does leave the back door open to socialism. And that still remains true of the conference report, particularly in reference to the patent sections, as the gentleman from Texas [Mr. LANHAM] has pointed out to you. Nevertheless, its socialistic features constitute a long-range danger. What we are confronted with today is the short-term danger of not protecting our atomic supremacy now, and the short-term necessity of working for international atomic control. I think we must trust in the patriotism of the President, and we must hope and believe that he will place on the Commission five men of integrity and brains and truly American convictions, who will see that this legislation is not abused in the patent field or any other, to destroy our American free-enterprise system.

There is a good deal of talk about this legislation being premature in view of the facts that international arrangements in atomic control, and peace treaties are not signed. One of the reasons which make this precise legislation necessary is that we cannot get international arrangements in atomic control unless we do have this bill.

You have all read the newspapers. You saw that the Russians have currently turned down the Baruch plan. There will be no incentive for them further to discuss the international control of atomic energy unless we can fortify the position of the Atomic Commission in the UNO with this legislation, which provides domestic controls of the same nature as those proposed internationally. What we will not, or dare not, do ourselves, we cannot expect other nations to do.

We must not forget that within from 5 to 15 years the Russians are going to have all the atomic bombs they want. It will be 15 years if they have to do it alone, because of their scientific, industrial, and technological backwardness, but probably not more than 5 years if they can communize Germany, or if Germany itself becomes communized, and aligns itself as a satellite state of the Soviet Union. Then German technicians, German scientists, German know-how, German skill, all which we certainly should have learned after two world wars are not to be sneezed at, combined with Russian aggressiveness and Russian manpower, would thus shorten the time it would take Soviet Russia to get the bomb. Our choice is between truly international control—and an atom bomb race after that, which would certainly end in atomic war.

In the meanwhile, this bill safeguards our own national security, while allowing us to advance down the road to peace, trying as best we can to persuade our Russian friends that the cause of peace and world prosperity would best be served if they came in with us on an international control plan which would protect all the nations, great and small.

I know of nothing that will so strengthen the hands of our statesmen in Paris, and of our United Nations Atomic Commission in New York, as the adoption of this legislation, which will help us to control fissionable materials and also give us some control and direction over scientific research in this field.

If you read the newspapers yesterday you saw the story about the sudden inexplicable disappearance of uranium, which is a fissionable material, in Brazil. Nobody knows where it went, after it was acquired by the Brazilians, apparently we do not know where that material has gone, or to what use it is currently being put. This is a bill which will enable America to keep an eye on the ownership and movement of fissionable material in all countries, including our own.

The conferees were, it seems very plain, men who understood very well what it meant to split the atom. They also being good Americans understand what it is to split their differences. And apart from the highly controversial patent section the Senate receded in a good many matters important to the House, matters which do improve the legislation. I, like others, am deeply alarmed by the implications of the patent section. But in the end, we dare not take any chances on our atomic security in the next crucial 12 months. And let us remember, and take comfort of the fact that the joint committee provided by the bill, of Senators and Representatives, can at all times watch the Commission, review its reports, and see that it not abusing its authority. They will be, and must be, the custodians of our liberties, wherever they may be threatened by this bill.

Mr. THOMASON. Mr. Speaker, I yield 1½ minutes to the gentleman from California [Mr. JOHNSON].

(Mr. JOHNSON of California asked and was given permission to revise and extend his remarks.)

Mr. JOHNSON of California. The purpose of taking this minute is to ask a question along this line: If we adopt the conference report, will that mean that in the field of patents every single unique device that is developed, such as a device to improve a cyclotron, for instance, will go into the hands of the Government? I would like to have the gentleman from North Carolina answer that question.

Mr. DURHAM. It is solely for the purpose of covering patents on fissionable material and nuclear material. It says in the bill that it is only for that purpose.

Mr. JOHNSON of California. I know, but some of us do not know just how broad that is. Does it mean that it only covers those materials from which bombs can be made?

Mr. DURHAM. That is correct, as I understand it.

Mr. JOHNSON of California. For instance, out in California we have a cyclotron at the University of California that cracks atoms, but that machine cannot make bombs. Now, would any device to perfect that machine, which is patentable, be outside the scope of the provision of this bill as reported back by the conferees?

Mr. DURHAM. I would say if that machine were capable of making fissionable material it would come under this provision.

Mr. JOHNSON of California. This machine only cracks atoms and does not make bombs.

Mr. DURHAM. Then how are they going to get the fissionable material?

Mr. JOHNSON of California. I do not know.

Mr. DURHAM. They must get it through the use of the equipment.

The SPEAKER. The time of the gentleman from California has expired.

Mr. THOMASON. Mr. Speaker, I yield 1½ minutes to the gentleman from Iowa [Mr. MARTIN].

Mr. MARTIN of Iowa. Mr. Speaker, I am keenly disappointed in the results of the conference on this legislation. I cannot give up, lying down, the importance of the taking of an active part by a representative of the armed forces in a field that involves one of the greatest potential weapons of all time. I cannot surrender completely the whole field of atomic energy policy making to the scientists or to the manufacturers, and bar absolutely only one class of people, namely, those who know something about military application of any super weapon such as the atomic bomb. In spite of all you say about it, the time has come when our Nation must not appease potential future enemies in that fashion. This is no time to set the stage for the first Munich of World War III. That is exactly what you are doing—exactly that and nothing else. When the time comes when I can prove to you that I am right, it will be too late. You will then be led around by the nose by foreign enemies who are laughing up their sleeves at you now for appeasing them and sticking your ostrich head deeper below the sands than any isolationist that has ever been condemned by the left-wing internationalists of this Nation.

The SPEAKER. The time of the gentleman from Iowa has expired.

Mr. THOMASON. Mr. Speaker, I yield the balance of the time to the gentleman from Minnesota [Mr. JUDD].

Mr. JUDD. Mr. Speaker, I do not believe anybody can accuse me of being an appeaser of any of these countries which have been mentioned as possible dangers to our security. I support this conference report precisely because I want us to do our utmost to assure the Nation's security.

The Bikini test was called Operations Crossroads, because it was held at the crossroads of the Pacific. It might well have been called that because the unleashing of atomic energy is the crossroads of history. That is where we are this afternoon. We are deciding which way our Nation and the world are to take at the great crossroads.

There are about four possibilities. One, we can ignore atomic energy, rest on our past achievements, fail to keep in the forefront of progress until somebody blows us off the face of the earth or covers our land with radioactive energy, making life impossible.

Second, we can say that since we have the secret now, we can beat other coun-

tries by building more and bigger and better bombs than they; therefore we have nothing to fear.

The trouble with that argument is that a nation does not need to have any bigger or better bombs than exist now. If, and when other nations are able to build them, as they will be in a relatively short time, all they need is a few hundred of the present type delivered by plane or rocket, to cripple us hopelessly.

Third, we could wipe out every possible potential enemy right now while we alone have the bomb. The trouble with that course is twofold: First, we could not do it, because the President and the Army do not have any such power, and I think you will agree there would be quite a little discussion before the Congress would do it. The nation to be destroyed would certainly be notified well in advance. Second, we would not do it, because we just are not the sort of people who carry out sneak attacks like Pearl Harbor. We simply would not start such a war. It is unrealistic to imagine we would.

Fourth, we can try to develop international control with rigid and complete supervision of all fissionable materials, factories, and armaments in every country by a real international organization with no vetoes.

Bombs are now made in Tennessee, in Washington, and New Mexico. I live in Minnesota, but I am not scared. Why? Because the use of the bombs made in those three States is controlled by the United States Government on behalf of all the 48 States. They are for the security, not of three States, but of everybody.

I see no hope except in this fourth course. I believe we should take the lead in trying to unite in such a real organization all nations that will join. We cannot make headway in that direction unless we have unified control within our own country of all atomic energy, whether for military or for civilian purposes. That is why I support the conference report. We must have unified civilian control so that we can keep our present processes secret while doing everything possible to improve those processes, to expand our knowledge of atomic energy and skill in handling it.

Let us not make a wrong decision today at operations crossroads.

The SPEAKER. The time of the gentleman from Minnesota has expired.

Mr. THOMASON. Mr. Speaker, I move the previous question.

The previous question was ordered.

The SPEAKER. The question is on agreeing to the conference report.

The conference report was agreed to.

A motion to reconsider was laid on the table.

Mr. THOMASON. Mr. Speaker, I ask unanimous consent that all Members may have five legislative days in which to revise and extend their remarks at this point in the RECORD on the conference report just agreed to.

The SPEAKER. Is there objection to the request of the gentleman from Texas?

There was no objection.

THE CONFEREES HAVE BROUGHT US A SOUND BILL
FOR ADOPTION

Mr. DOYLE. Mr. Speaker, a few days ago when debate upon this vital subject

of the atomic-energy bill was in progress and it was known that the distinguished gentleman from Texas [Mr. LANHAM] was to offer an amendment to strike out all the patent section of the committee bill and to offer a substitute which would make unnecessary the obtaining of a license from the United States to obtain, or use, or develop atomic energy, even for military weapons, I naturally hesitated to speak in opposition to his proposals, for I know how deservedly his proposals receive the cordial regard by the Members of this House. However, as a new member of your Patents Committee, I soon discovered that his industry and knowledge and natural "drive" were all big factors in the functioning of that important committee.

Yet, having studied the committee bill at length and also having studied his proposals also at length, I felt I had a duty to speak out emphatically for the patent section of the committee bill and for its retention, as distinguished from the proposals of the gentleman from Texas.

The conferees have now put back the patent section of the House bill for which I spoke. I compliment the House conferees for agreeing to same. During the debate here a few days ago I felt many Members had not had opportunity to carefully study the bill and so must have voted under a mistaken idea of what it did do and did not do.

True it is that this conferees' report as to patents will place exclusive control of atomic energy for military purposes in the hands of Uncle Sam. But, my colleagues, why should it not be there? I have previously argued that such control would help take the profit out of war. I do it again. What a man makes for sale at a money profit, he is going to try to sell at the most profit possible. And, he is not always too choosy about his customers, as long as the customer pays him his price. So, it would be with the private manufacture of atomic energy for military weapons. The Government retaining exclusive control of the source of material and its manufacture for war-weapon uses and purposes should make it far more difficult for the development of international cartels in the field of munitions manufacture. And that is exactly what I said before and now repeat as highly desirable. The less material profit there is in war, the fewer wars we will have.

Because these are unusually hazardous times in the world's history, we must be willing to step forth in unusual pathways to peace. We must dare to pioneer in the field of essential legislation in this field of atomic energy, as much as in any field for world peace.

We must protect our field of free enterprise in patents in due fashion. But, gentlemen, there is no soundness in immediately releasing this most dangerous material to free enterprise to make money profit out of, at the expense of, our national safety and security. This bill guarantees every inventor an adequate compensation for his invention in this field. It assures an applicant for patent the same. We do not yet know the rudiments of need for our national security, and until we know what we need for

it, it is unsound and unsafe to let atomic energy loose for promiscuous acquisition and development.

Why the hurry? The war is not even officially ended as yet.

Besides, our executive leaders must know what they can and cannot do in the field of atomic energy. This is a world neighborhood problem now. It is not merely whether or not American inventors shall have full freedom to do as they please immediately.

The problem before us filters into the very fabric of international policy and world peace from atomic warfare. We must keep our President and delegates to Paris and other conferences where world peace is involved, in a position of knowing to what extent America can control atomic energy for war and peace purposes.

Therefore, any private control, without regard to our national security, of and for the purpose of war or military weapons, is fundamentally incompatible with our national welfare and security.

So I am pleased the conferees have confirmed my humble words of several days ago as also being their firm conviction and decision.

SITE ACQUISITION AND DESIGN OF FEDERAL BUILDINGS

Mr. LANHAM. Mr. Speaker, I move to suspend the rules and pass the bill (H. R. 6917) to provide for site acquisition and design of Federal buildings, and for other purposes, as amended.

The Clerk read the title of the bill.

The Clerk read the bill, as follows:

Be it enacted, etc.—

TITLE I

That the Federal Works Administrator is hereby authorized, under the provisions of the Public Buildings Act of May 25, 1926, as amended (40 U. S. C. 341-347), and as hereby further amended:

For projects outside the District of Columbia: To acquire sites, prepare drawings and specifications, perform other work for the accomplishment thereof, and establish limits of cost for building projects notwithstanding the fact that appropriations for construction work shall not have been made. The Federal Works Administrator (and the Postmaster General, where his Department is involved), shall select projects based upon reasonable geographical distribution and urgency of need. There is authorized to be appropriated \$30,000,000 for the foregoing purposes.

SEC. 2. The Federal Works Administrator is hereby authorized under the provisions of the Public Buildings Act of May 25, 1923, as amended (40 U. S. C. 341-347), and as hereby further amended, to provide for the following buildings in or near the District of Columbia and to establish the limits of costs therefor:

(a) General Accounting Office: The project for a building for the General Accounting Office, as authorized in the First Supplemental Civil Functions Appropriation Act of 1941 (54 Stat. 1036), is hereby revised to provide for an additional building on square 529 in the District of Columbia and a tunnel connecting the two buildings, and there is hereby authorized to be appropriated \$1,150,000 to acquire square 529, to prepare drawings and specifications for the revised project, and for any costs incident thereto.

(b) Film-storage buildings: A building or buildings on Government-owned land for the servicing and storing of film records for the National Archives and the Library of Congress, and there is hereby authorized to

be appropriated \$1,160,000 for the drawings and specifications for the whole project and for the construction of the first unit thereof.

(c) Office building, Suitland, Md.: For the preparation of drawings and specifications for an additional office building on Government-owned land, \$325,000.

SEC. 3. In carrying out the provisions of this title, the Federal Works Administrator is authorized to acquire lands, or interests in lands, as sites, or additions to sites, by purchase, condemnation, donation, exchange, or otherwise, and may prepare drawings and specifications prior or subsequent to the approval by the Attorney General of the title to sites for selected projects.

SEC. 4. Hereafter, when part of the cost of construction of a public-building project has been appropriated by Congress, the Federal Works Administrator may enter into contracts for construction work within the full limit of cost fixed by Congress therefor.

SEC. 5. Whenever deemed by him desirable or advantageous, the Federal Works Administrator is authorized to employ, by contract or otherwise and without regard to the Classification Act of 1923, as amended, or to the civil-service laws, rules, and regulations, or to section 3709 of the Revised Statutes, the services of established architectural or other professional or technical corporations, firms, or individuals, to such extent as he may require for any public-building project which the Public Buildings Administration is authorized by Congress to construct, or for any such project funds for which are transferred by another agency to the Public Buildings Administration for construction of the project, regardless of specific legislation governing such other agency: *Provided*, That this authorization shall not apply to the employment of such corporations, firms, or individuals on a permanent basis, but their services shall be limited to the individual project for which employed.

SEC. 6. The provisions of section 322 of the act of June 30, 1932, as amended (40 U. S. C. 278a), shall not apply with respect to the rental of temporary quarters for housing Federal activities during the replacement or remodeling of buildings by the Public Buildings Administration.

SEC. 7. The Commissioner of Public Buildings is authorized to contract for seeding, planting, or landscaping the grounds of any public building constructed by the Public Buildings Administration in an amount not exceeding \$1,000 without reference to section 3709 of the Revised Statutes.

SEC. 8. Section 5 of the Public Buildings Act of May 25, 1926 (44 Stat. 630), is hereby amended to delete the following words which appear at the end thereof: "and to charge against the total sum of \$150,000,000 hereinbefore authorized only the respective net excess cost, if any, over and above the proceeds of such sales, or providing such new sites and buildings", and after the words "miscellaneous receipts" change the comma to a period.

SEC. 9. The Commissioner of Public Buildings, together with the Postmaster General where his office is concerned, is authorized to accept on behalf of the United States unconditional gifts of real, personal, or other property in aid of any project or function within their respective jurisdictions.

SEC. 10. Effective on the date of approval of this act, all office furniture and rugs, excepting that purchased by Government-owned corporations, which are now or may hereafter be located in Government-owned or leased buildings in and outside the District of Columbia, operated by the Public Buildings Administration, shall be and remain in its custody and under its control without exchange of funds and irrespective of the appropriations from which the furniture was or may be procured or the source from which it was obtained. Effective July 1, 1947, unless specifically so provided, appropriations other than appropriations to the Public

Buildings Administration shall not be available for the purchase of furniture and rugs in such buildings, except in executive suites.

SEC. 11. The Commissioner of Public Buildings shall have exclusive authority in all buildings operated by the Public Buildings Administration to enter into contracts, upon such terms and conditions as he may find to be in the public interest and without securing competitive bids, for food services in buildings designed to include such facilities or where such services are subsequently found to be necessary; to establish rules and regulations for the operation thereof; and to make all sanitary inspections in connection therewith: *Provided*, That the Commissioner of Public Buildings wherever he deems it necessary in the public interest may exempt any building operated by the Public Buildings Administration from the provisions of this section.

SEC. 12. All acts and parts of acts inconsistent or in conflict with the foregoing provisions are hereby repealed to the extent of such inconsistency conflict.

TITLE II

The United States Courts of the District of Columbia Building: The Architect of the Capitol is hereby authorized and directed to prepare drawings and specifications and do all work incidental thereto, for a building (including equipment, approaches, architectural landscape treatment of the grounds and connections with public utilities, and the Federal heating system) for the use of the United States Court of Appeals for the District of Columbia and the District Court of the United States for the District of Columbia, to be located on that part of reservation 10 which is bounded by Constitution Avenue on the south, C Street on the north, John Marshall Place on the west, and Third Street on the east, containing 245,266 square feet, title to which is in the District of Columbia with the exception of two pieces of land having a combined total area of 1,238 square feet, title to which said two pieces of land is in the United States.

SEC. 2. (a) The plans for the building shall be prepared under the direction of, and shall be approved by, a committee of five members to be composed of the chief justice of the United States Court of Appeals for the District of Columbia, the chief justice of the District Court of the United States for the District of Columbia, an associate justice of the District Court of the United States for the District of Columbia to be designated by the chief justice of the United States Court of Appeals for the District of Columbia, a member of the Board of Commissioners of the District of Columbia to be designated by said Board, and the Architect of the Capitol.

(b) The said committee shall establish the limit of cost for such building notwithstanding the fact that appropriations for construction work shall not have been made.

(c) The said committee and such assistants as they may designate are authorized to perform such travel for visiting other court structures as may be necessary to enable them to carry out the purposes of this title.

SEC. 3. The exact location of the building on the site shall be approved by the National Capital Park and Planning Commission, and the design shall be approved by the Commission of Fine Arts.

SEC. 4. The Commissioners of the District of Columbia are hereby authorized and directed to convey to the United States title to that part of reservation 10 which is owned by the District of Columbia within the area described in section 1 of this title, excepting a strip 5 feet wide immediately adjacent to the south line of C Street and running parallel with said south line of C Street from Third Street to John Marshall Place, said strip to be reserved for the widening of C Street. The compensation for the site, which is herein fixed at \$2,420,000, shall constitute

a credit to the District of Columbia for its share of the cost of the entire project as hereafter established by the Congress.

SEC. 5. The Architect of the Capitol is hereby authorized to employ the necessary personal and other services, to enter into the necessary contracts, and to make such other expenditures (including expenditures for travel) as may be necessary to carry out the provisions of sections 1 and 2 of this title, and there is hereby authorized to be appropriated \$400,000 for such purposes.

The SPEAKER. Is a second demanded?

Mr. MCGREGOR. Mr. Speaker, I demand a second.

Mr. LANHAM. Mr. Speaker, I ask unanimous consent that a second be considered as ordered.

The SPEAKER. Is there objection to the request of the gentleman from Texas? There was no objection.

The SPEAKER. The gentleman from Texas is recognized.

Mr. LANHAM. Mr. Speaker, on last Saturday I made a very full explanation in the RECORD of the purposes of this bill. My interest in it after this session of the Congress will naturally be that of an American citizen and a constituent of some Member of this body, but I think perhaps two-thirds or more of the Members of the House have requested this legislation.

This legislation has to do with the drawing of plans and specifications and the acquisition of sites for Federal structures throughout the United States. There has been no such construction since before the beginning of the World War.

If there are questions to be asked in amplification of the rather lengthy explanation I made on last Saturday, and which you will find in the RECORD, I shall be glad to answer them. If not, I reserve the remainder of my time.

Mr. MCGREGOR. Mr. Speaker, I yield myself 10 minutes.

Mr. Speaker, first I wish to pay my respects to the gentleman who just preceded me, my distinguished chairman, who is retiring from the Congress of his own initiative. As a presiding officer, as a gentleman, as a Member of Congress, and as a friend, he is one individual in whom I am sure we all have great faith, and I am sure we all hate to see him leave Congress. We are losing a real friend and the district which he has represented for so long a time is losing a real representative and a worthy gentleman.

Mr. Speaker, I take exception to this particular piece of legislation, H. R. 6917, for a number of reasons. May I first call your attention to the fact, as the distinguished chairman has said, that it establishes an authorization for \$30,000,000 for what? For the drawing of plans and the purchase of sites and arrangements for the construction of Federal buildings outside of the District of Columbia.

We heard a message read from the President a few minutes ago, a letter written to the distinguished chairman of the Committee on Banking and Currency insisting on housing for veterans. We heard the distinguished chairman of this committee insist that the WET housing bill be brought up so the veter-

32. SUGAR PRICES. Extension of remarks of Rep. Domengeaux, La., inserting a statement urging increases in sugar prices (p. A4740).
33. CONGRESSIONAL REORGANIZATION. Extension of remarks of Rep. Brown, Ga., opposing the provision of the LaFollette bill which would transfer CCC matters from the Banking and Currency Committee to the Agriculture Committee (pp. A4737-8).
34. PRICE CONTROL. Various statements, etc., regarding price control (pp. A4698-9, 4702-3, 4735, 4746).

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35. ALCOHOL; RUBBER. Passed with amendment S. J. Res. 166, to permit alcohol plants to produce sugars and sirups until Dec. 31, 1947, and to postpone the disposition of alcohol-rubber plants pending establishment of a permanent rubber policy (pp. 10403-4).
36. TRANSPORTATION. Debated H. R. 2536, the Bulwinkle bill to amend the Interstate Commerce Act regarding agreements among carriers (pp. 10365, 10372-6, 10388-9, 10392-402).
37. SURPLUS PROPERTY. Concurred in the House amendments to S. 1636, to designate the State Department as the disposal agency for surplus property outside continental U. S. (p. 10368). This bill will now be sent to the President.
Agreed to the conference report on H. R. 6702, to clarify the rights of former owners of surplus real property to reacquire it (p. 10376).
38. MINERALS. Agreed to the conference report on S. 1236, to amend the Mineral Leasing Act so as to promote the development of oil and gas on the public domain (pp. 10368-9). This bill will now be sent to the President.
39. VOCATIONAL EDUCATION. Concurred in the House amendments to S. 619, the vocational education bill (p. 10372). This bill will now be sent to the President.
40. RETIREMENT. Agreed to the conference report on H. R. 4718, to amend the Civil Service Retirement Act so as to provide annuities for certain personnel who are separated (pp. 10365-6). This bill will now be sent to the President.

41. ATOMIC ENERGY. S. 1717, the atomic-energy bill, was inserted in the form in which it was finally passed (pp. 10405-11).

42. PRICE CONTROL. Sen. Thomas, Okla., inserted a statement of questions and answers regarding the new price-control law (p. 10377).
43. HOUSING. Sen. Wherry inserted and discussed a Census Bureau and Budget Bureau statement giving background data regarding the housing problem (pp. 10377-87).
44. ADJOURNED until Mon., July 29 (p. 10412).

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45. COOLEY FARM-CREDIT BILL. Received the conference report on this bill, H. R. 5991 (pp. 10454-61). The conferees provided for administration of the bill through a Farmers' Home Administration, excepted from the re-transfer provisions those properties under NHA which are now in liquidation, provided that liquidation of resettlement projects shall be under the terms of S. 704, provided that no person who has failed to liquidate his indebtedness for five

consecutive years shall be eligible for further loans until he has paid such debt in full; included provisions for committee certifications regarding borrowers and loans; eliminated the Senate provisions for guidance to veterans irrespective of prior farming experience or ability to get credit elsewhere and the authorization for grants to individuals or cooperatives; included Senate provisions for loans to repair, improve, and enlarge farms, and for loans to veterans with disabilities; provided for a $3\frac{1}{2}\%$ interest rate; deleted the House requirement that a tenant purchase borrower pay appraisal and inspection costs; adopted the provision limiting the size of tenant purchase loans; included the \$100,000 minimum for each State; agreed to the House provision regarding allocation of special appropriations for veterans; included the farm-mortgage insurance provisions with modifications; provided for Senate confirmation of the Administrator; authorized temporary postponement of liquidation of regional finance offices; eliminated the requirement that installments be "equal"; and transferred crop-feed loans to the new agency.

46. RAILROAD RETIREMENT. Concurred, 189-64, in the Senate amendments to H. R. 1362, which struck out the coverage of certain non-railroad employees (pp. 10447-52). This bill will now be sent to the President.
47. WOMEN'S RIGHTS. The Labor Committee reported with amendments H. R. 5221, providing for equal pay for equal work of men and women (H. Rept. 2687) (p. 10471).
48. HOMESTEADS. The Public Lands Committee reported with amendment H. R. 5118, to amend the act relating to credit for military or naval service in connection with homestead entries (H. Rept. 2688) (p. 10471).
49. PRICE CONTROL; STATISTICS. The Labor Committee reported without amendment H. J. Res. 389, to authorize the Bureau of Labor Statistics to collect price and rent information in additional cities and at more frequent intervals (H. Rept. 2690) (p. 10471).
50. GRAIN; ALCOHOL. Received various petitions against use of grain for alcohol during the shortage (p. 10471).
51. ASSISTANT SECRETARIES OF AGRICULTURE. Reps. Smith (Ohio) and Buck (N.Y.) objected to Rep. Flannagan's (Va.) requests to consider by unanimous consent H.R. 5757, to establish two additional offices of Assistant Secretaries of Agriculture (pp. 10417, 10433). Rep. Flannagan made and withdrew a motion to suspend the rules and pass the bill (pp. 10417, 10433).
52. MARKETING AGREEMENTS. Passed with amendments H.R. 6303, to amend the Agricultural Marketing Agreement Act of 1937, to provide that on agricultural commodities other than milk and its products, marketing agreements and orders may operate under certain conditions without the strict application of the parity limitations; to grant specific authority for the requirement of compulsory inspection; to permit the levy and collection of continuous assessments pursuant to a marketing agreement and order; and to add "almonds" to the commodities to which the Act is applicable (pp. 10432-3). Section 4, to authorize a referendum among commodity producers to include additional commodities under the Act, was stricken from the bill by a committee amendment (p. 10433). Earlier in the day Rep. Smith, Ohio, objected to Rep. Flannagan's (Va.) request to consider the bill by unanimous consent (p. 10417).
53. WATER POLLUTION; HEALTH. Passed without amendment H.R. 7101, to prohibit, for the purpose of protecting American agriculture, horticulture, livestock, and the public health, the throwing or depositing of garbage from any vessel,

Mr. GURNEY. Let me say that during the absence from the Chamber during the last few minutes of the Senator from Kansas one or two small noncontroversial bills were passed. In view of that fact, and in view of the importance of this bill to the Senator from Texas, I hope the Senator from Kansas will withdraw his objection, because I am sure that the consideration of the bill will require only a moment.

Mr. REED. I withdraw the objection.

The PRESIDING OFFICER. The bill will be stated by title for the information of the Senate.

The CHIEF CLERK. A bill (H. R. 6406) authorizing the State of Texas, acting through the State Highway Commission of Texas, or the successors thereof, to acquire, construct, maintain, and operate a free bridge across the Rio Grande at or near Del Rio, Tex.

The PRESIDING OFFICER. Is there objection to the present consideration of the bill?

There being no objection, the bill was considered, ordered to a third reading, read the third time, and passed.

VETERANS' CANTEN SERVICE IN THE VETERANS' ADMINISTRATION

Mr. JOHNSON of Colorado. Mr. President, will the Senator from Georgia yield to me?

Mr. RUSSELL. Mr. President, I do not know what the purpose of the Senator from Kansas [Mr. REED] is. I wish to be generous with my colleagues. But if any technical points are to be raised, I do not wish to lose my right to the floor.

Mr. JOHNSON of Colorado. Mr. President, I ask unanimous consent to submit a request without taking the Senator from Georgia from the floor.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. JOHNSON of Colorado. At the last call of the calendar House bill 6836 was passed. I do not know what the calendar number is. The bill is not now on the calendar. It was on the calendar when the calendar was last called. The bill was passed by unanimous consent. After it was passed, General Bradley personally stated that a brief amendment which was inserted in the bill on the floor of the House had made the bill inoperative. The purpose of the bill is to establish and provide for the maintenance and operation of a veterans' canteen service in the Veterans' Administration, and for other purposes. It is quite an important bill, and a very worthy one. It is desired to establish a canteen service in the hospitals for the benefit of veterans.

Therefore, upon the request of General Bradley, who also talked with the Senator from Georgia [Mr. GEORGE], chairman of our committee, I entered a motion for the reconsideration of the bill. I now wish to call up the motion, amend the bill, and pass it.

The PRESIDING OFFICER. The question is on agreeing to the motion of the Senator from Colorado that the vote by which House bill 6836 was passed, as well as the votes by which the amendments were ordered to be engrossed and

the bill to be read a third time, be reconsidered.

The motion was agreed to.

The PRESIDING OFFICER. Is there objection to the present consideration of the bill?

There being no objection, the Senate proceeded to consider the bill.

Mr. JOHNSON of Colorado. Mr. President, I offer the amendment which I send to the desk and ask to have stated.

The PRESIDING OFFICER. The amendment offered by the Senator from Colorado will be stated.

The CHIEF CLERK. On page 3, line 23, after the word "Act," it is proposed to insert a period and strike out "and to maintain the operation of the service on a self-sustaining basis."

Mr. JOHNSON of Colorado. Mr. President, it will be impossible for the canteen service to be instituted in the first instance if that clause remains in the bill. It will be operated on a self-sustaining basis after it is started, but it cannot be started with that proviso in the bill, so I ask that the amendment striking out that language be agreed to.

The PRESIDING OFFICER. The question is on agreeing to the amendment offered by the Senator from Colorado.

The amendment was agreed to.

The amendments were ordered to be engrossed, and the bill to be read a third time.

The bill was read the third time and passed.

Mr. JOHNSON of Colorado. I thank the Senator from Georgia.

After the conclusion of Mr. RUSSELL's speech,

OFFICERS AND EMPLOYEES FOR CIRCUIT COURTS OF APPEALS AND DISTRICT COURTS—CONFERENCE REPORT

Mr. McCARRAN submitted the following report:

The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H. R. 4230) to provide necessary officers and employees for circuit courts of appeals and district courts, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendments of the Senate and agree to the same.

PAT McCARRAN,
ABE MURDOCK,
ALEXANDER WILEY,

Managers on the Part of the Senate.

WILLIAM T. BYRNE,
CHAUNCEY W. REED,

Managers on the Part of the House.

Mr. McCARRAN. Mr. President, I ask unanimous consent for the immediate consideration and adoption of the conference report.

There being no objection, the report was considered and agreed to.

ATOMIC ENERGY ACT OF 1946

Mr. McMAHON. Mr. President, I ask unanimous consent to have printed in the RECORD Senate bill 1717 as it went to the President for signature. I do so upon request of the Senator from Colorado [Mr. MILLIKIN] who is of the opin-

ion that the bill should be printed in the RECORD.

There being no objection the bill (S. 1717) for the development and control of atomic energy, was ordered to be printed in the RECORD, as follows:

Be it enacted, etc.—

DECLARATION OF POLICY

SECTION 1. (a) Findings and declaration: Research and experimentation in the field of nuclear chain reaction have attained the stage at which the release of atomic energy on a large scale is practical. The significance of the atomic bomb for military purposes is evident. The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved. Therefore, any legislation will necessarily be subject to revision from time to time. It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life. Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

(b) Purpose of act: It is the purpose of this act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the fields; and

(5) A program of administration which will be consistent with the foregoing policies and with international arrangements made by the United States, and which will enable the Congress to be currently informed so as to take further legislative action as may hereafter be appropriate.

ORGANIZATION

SEC. 2. (a) Atomic Energy Commission:

(1) There is hereby established an Atomic Energy Commission (herein called the Commission), which shall be composed of five members. Three members shall constitute a quorum of the Commission. The President shall designate one member as chairman of the Commission.

(2) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate. In submitting any nomination to the Senate, the President shall set forth the experience and the qualifications of the nominee. The term of office of each member of the Commission taking office prior to the expiration of 2 years after the date of enactment of this act shall expire upon the expiration of such 2 years.

The terms of office of each member of the Commission taking office after the expiration of 2 years from the date of enactment of this act shall be 5 years, except that (A) the terms of office of the members first taking office after the expiration of 2 years from the date of enactment of this act shall expire, as designated by the President at the time of appointment, one at the end of 3 years, one at the end of 4 years, one at the end of 5 years, one at the end of 6 years, and one at the end of 7 years, after the date of enactment of this act; and (B) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term. Any member of the Commission may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. Each member, except the chairman, shall receive compensation at the rate of \$15,000 per annum; and the chairman shall receive compensation at the rate of \$17,500 per annum. No member of the Commission shall engage in any other business, vocation, or employment than that of serving as a member of the Commission.

(3) The principal office of the Commission shall be in the District of Columbia, but the Commission or any duly authorized representative may exercise any or all of its powers in any place. The Commission shall hold such meetings, conduct such hearings, and receive such reports as may be necessary to enable it to carry out the provisions of this act.

(4) There are hereby established within the Commission—

(A) a General Manager, who shall discharge such of the administrative and executive functions of the Commission as the Commission may direct. The General Manager shall be appointed by the President by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$15,000 per annum. The Commission may make recommendations to the President with respect to the appointment or removal of the General Manager.

(B) a Division of Research, a Division of Production, a Division of Engineering, and a Division of Military Application. Each division shall be under the direction of a Director who shall be appointed by the Commission, and shall receive compensation at the rate of \$14,000 per annum. The Director of the Division of Military Application shall be a member of the armed forces. The Commission shall require each such division to exercise such of the Commission's powers under this act as the Commission may determine, except that the authority granted under section 3 (a) of this act shall not be exercised by the Division of Research.

(b) General Advisory Committee: There shall be a General Advisory Committee to advise the Commission on scientific and technical matters relating to materials, production, and research and development, to be composed of nine members, who shall be appointed from civilian life by the President. Each member shall hold office for a term of 6 years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term; and (2) the terms of office of the members first taking office after the date of the enactment of this act shall expire, as designated by the President at the time of appointment, three at the end of 2 years, three at the end of 4 years, and three at the end of 6 years, after the date of the enactment of this act. The committee shall designate one of its own members as chairman. The committee shall meet at least four times in every calendar year. The members of the committee shall receive a per diem compensation of \$50 for each day spent in meetings or conferences, and all members shall

receive their necessary traveling or other expenses while engaged in the work of the committee.

(c) Military Liaison Committee: There shall be a Military Liaison Committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine. The Commission shall advise and consult with the committee on all atomic energy matters which the committee deems to relate to military applications, including the development, manufacture, use, and storage of bombs, the allocation of fissionable material for military research, and the control of information relating to the manufacture or utilization of atomic weapons. The Commission shall keep the Committee fully informed of all such matters before it and the Committee shall keep the Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the Committee at any time concludes that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the Departments of War or Navy, derived from the Constitution, laws, and treaties, the Committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy. If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

(d) Appointment of Army and Navy officers: Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 edition, title 10, sec. 576), section 212 of the act entitled "An Act making appropriations for the Legislative Branch of the Government for the fiscal year ending June 30, 1933, and for other purposes," approved June 30, 1932, as amended (U. S. C., 1940 edition, title 5, sec. 59a) section 2 of the act entitled "An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June 30, 1895, and for other purposes," approved July 31, 1894, as amended (U. S. C., 1940 edition, title 5 sec. 62) or any other law, any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to his commissioned status as such officer. Any such officer serving as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in subsection (a) (4) (B) of this section.

RESEARCH

SEC. 3. (a) Research assistance: The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development activities in the fields specified below by private or public institutions or persons and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields. To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, and loans) for the conduct of research and development activities relating to—

- (1) nuclear processes;
- (2) the theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) utilization of fissionable and radioactive materials for medical, biological, health, or military purposes;
- (4) utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and

(5) the protection of health during research and production activities.

The Commission may make such arrangements without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and may make partial and advance payments under such arrangements, and may make available for use in connection therewith such of its equipment and facilities as it may deem desirable. Such arrangements shall contain such provisions to protect health, to minimize danger from explosion and other hazards to life or property, and to require the reporting and to permit the inspection of work performed thereunder, as the Commission may determine; but shall not contain any provisions or conditions which prevent the dissemination of scientific or technical information, except to the extent such dissemination is prohibited by law.

(b) Research by the Commission: The Commission is authorized and directed to conduct, through its own facilities, activities and studies of the types specified in subsection (a) above.

PRODUCTION OF FISSIONABLE MATERIAL

SEC. 4. (a) Definition: As used in this act, the term "produce", when used in relation to fissionable material means to manufacture, produce, or refine fissionable material, as distinguished from source materials as defined in section 5 (b) (1), or to separate fissionable material from other substances in which such material may be contained or to produce new fissionable material.

(b) Prohibition: It shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

(c) Ownership and operation of production facilities:

(1) Ownership of production facilities: The Commission, as agent of and on behalf of the United States, shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (A) are useful in the conduct of research and development activities in the fields specified in section 3, and (B) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

(2) Operation of the Commission's production facilities: The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, except as authorized by the Commission, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all

safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) Operation of other production facilities: Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) Irradiation of materials: For the purpose of increasing the supply of radioactive materials, the Commission and persons lawfully producing or utilizing fissionable material are authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

(e) Manufacture of production facilities: Unless authorized by a license issued by the Commission, no person may manufacture, produce, transfer, or acquire any facilities for the production of fissionable material. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish and shall be issued in accordance with such standards and upon such conditions as will restrict the production and distribution of such facilities to effectuate the policies and purposes of this act. Nothing in this section shall be deemed to require a license for such manufacture, production, transfer, or acquisition incident to or for the conduct of research or development activities in the United States of the types specified in section 3, or to prohibit the Commission from manufacturing or producing such facilities for its own use.

CONTROL OF MATERIALS

SEC. 5. (a) Fissionable materials:

(1) Definition: As used in this act, the term "fissionable material" means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material, or any material artificially enriched by any of the foregoing; but does not include source materials, as defined in section 5 (b) (1).

(2) Government ownership of all fissionable material: All right, title, and interest within or under the jurisdiction of the United States, in or to any fissionable material, now or hereafter produced, shall be the property of the Commission, and shall be deemed to be vested in the Commission by virtue of this act. Any person owning any interest in any fissionable material at the time of the enactment of this act, or owning any interest in any material at the time when such material is hereafter determined to be a fissionable material, or who lawfully produces any fissionable material incident to privately financed research or development activities, shall be paid just compensation therefor. The Commission may, by action consistent with the provisions of paragraph (4) below, authorize any such person to retain possession of such fissionable material, but no person shall have any title in or to any fissionable material.

(3) Prohibition: It shall be unlawful for any person, after 60 days from the effective date of this act to (A) possess or transfer any fissionable material, except as authorized by the Commission, or (B) export from or import into the United States any fissionable material, or (C) directly or indirectly engage

in the production of any fissionable material outside of the United States.

(4) Distribution of fissionable material: Without prejudice to its continued ownership thereof, the Commission is authorized to distribute fissionable material owned by it, with or without charge, to applicants requesting such material (A) for the conduct of research or development activities either independently or under contract or other arrangement with the Commission, (B) for use in medical therapy, or (C) for use pursuant to a license issued under the authority of section 7. Such material shall be distributed in such quantities and on such terms that no applicant will be enabled to obtain an amount sufficient to construct a bomb or other military weapon. The Commission is directed to distribute sufficient fissionable material to permit the conduct of widespread independent research and development activity, to the maximum extent practicable. In determining the quantities of fissionable material to be distributed, the Commission shall make such provisions for its own needs and for the conservation of fissionable material as it may determine to be necessary in the national interest for the future development of atomic energy. The Commission shall not distribute any material to any applicant, and shall recall any distributed material from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as may be established by the Commission, or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(5) The Commission is authorized to purchase or otherwise acquire any fissionable material or any interest therein outside the United States, or any interest in facilities for the production of fissionable material, or in real property on which such facilities are located, without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under contracts for such purposes. The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

(b) Source materials:

(1) Definition: As used in this act, the term "source material" means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

(2) License for transfers required: Unless authorized by a license issued by the Commission, no person may transfer or deliver, receive possession of or title to, or export from the United States any source material after removal from its place of deposit in nature, except that licenses shall not be required for quantities of source materials which, in the opinion of the Commission, are unimportant.

(3) Issuance of licenses: The Commission shall establish such standards for the issuance, refusal, or revocation of licenses as it may deem necessary to assure adequate source materials for production, research, or development activities pursuant to this act or to prevent the use of such materials in a manner inconsistent with the national welfare. Licenses shall be issued in accordance

with such procedures as the Commission may by regulation establish.

(4) Reporting: The Commission is authorized to issue such regulations or orders requiring reports of ownership, possession, extraction, refining, shipment, or other handling of source materials as it may deem necessary, except that such reports shall not be required with respect to (A) any source material prior to removal from its place of deposit in nature, or (b) quantities of source materials which in the opinion of the Commission are unimportant or the reporting of which will discourage independent prospecting for new deposits.

(5) Acquisition: The Commission is authorized and directed to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this act. Any purchase made under this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made thereunder. The Commission may establish guaranteed prices for all source materials delivered to it within a specified time. Just compensation shall be made for any property taken, requisitioned, or condemned under this paragraph.

(6) Exploration: The Commission is authorized to conduct and enter into contracts for the conduct of exploratory operations, investigations, and inspections to determine the location, extent, mode of occurrence, use, or conditions of deposits or supplies of source materials, making just compensation for any damage or injury occasioned thereby. Such exploratory operations may be conducted only with the consent of the owner, but such investigations and inspections may be conducted with or without such consent.

(7) Public lands: All uranium, thorium, and all other materials determined pursuant to paragraph (1) of this subsection to be peculiarly essential in the production of fissionable material, contained, in whatever concentration, in deposits in the public lands are hereby reserved for the use of the United States subject to valid claims, rights, or privileges existing on the date of the enactment of this act: *Provided, however,* That no individual, corporation, partnership, or association, which had any part, directly or indirectly, in the development of the atomic bomb project, may benefit by any location, entry, or settlement upon the public domain made after such individual, corporation, partnership, or association took part in such project, if such individual, corporation, partnership, or association, by reason of having had such part in the development of the atomic bomb project, acquired confidential official information as to the existence of deposits of such uranium, thorium, or other materials in the specific lands upon which such location, entry, or settlement is made, and subsequent to the date of the enactment of this act made such location, entry, or settlement or caused the same to be made for his, its, or their benefit. The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources, under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and

prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby. Any land so patented, conveyed, leased, or otherwise disposed of may be used, and any rights under any such permit or authorization may be exercised, as if no reservation of such materials has been made under this subsection; except that, when such use results in the extraction of any such material from the land in quantities which may not be transferred or delivered without a license under this subsection, such material shall be the property of the Commission and the Commission may require delivery of such material to it by any possessor thereof after such material has been separated as such from the ores in which it was contained. If the Commission requires the delivery of such material to it, it shall pay to the person mining or extracting the same, or to such other person as the Commission determines to be entitled thereto, such sums, including profits, as the Commission deems fair and reasonable for the discovery, mining, development, production, extraction, and other services performed with respect to such material prior to such delivery, but such payment shall not include any amount on account of the value of such material before removal from its place of deposit in nature. If the Commission does not require delivery of such material to it, the reservation made pursuant to this paragraph shall be of no further force or effect.

(c) Byproduct materials:

(1) Definition: As used in this act, the term "byproduct material" means any radioactive material (except fissionable material) yielded in or made radioactive by exposure to the radiation incident to the processes of producing or utilizing fissionable material.

(2) Distribution: The Commission is authorized to distribute, with or without charge, byproduct materials to applicants seeking such materials for research or development activity, medical therapy, industrial uses, or such other useful applications as may be developed. In distributing such materials, the Commission shall give preference to applicants proposing to use such materials in the conduct of research and development activity or medical therapy. The Commission shall not distribute any byproduct materials to any applicant, and shall recall any distributed materials from any applicant who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such materials in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(d) General provisions: The Commission shall not—

(1) distribute any fissionable material to (A) any person for a use which is not under or within the jurisdiction of the United States, (B) any foreign government, or (C) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security; and

(2) license any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security.

MILITARY APPLICATIONS OF ATOMIC ENERGY

SEC. 6. (a) Authority: The Commission is authorized to—

(1) conduct experiments and do research and development work in the military application of atomic energy; and

(2) engage in the production of atomic bombs, atomic bomb parts, or other military weapons utilizing fissionable materials; except that such activities shall be carried

on only to the extent that the express consent and direction of the President of the United States has been obtained, which consent and direction shall be obtained at least once each year.

The President from time to time may direct the Commission (1) to deliver such quantities of fissionable materials or weapons to the armed forces for such use as he deems necessary in the interest of national defense or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon.

(b) Prohibition: It shall be unlawful for any person to manufacture, produce, transfer, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon, except as may be authorized by the Commission. Nothing in this subsection shall be deemed to modify the provisions of section 4 of this act, or to prohibit research activities in respect of military weapons, or to permit the export of any such equipment or device.

UTILIZATION OF ATOMIC ENERGY

SEC. 7. (a) License required: It shall be unlawful, except as provided in sections 5 (a) (4) (A) or (B) or 6 (a), for any person to manufacture, produce, or export any equipment or device utilizing fissionable material or atomic energy or to utilize fissionable material or atomic energy with or without such equipment or device, except under and in accordance with a license issued by the Commission authorizing such manufacture, production, export, or utilization. No license may permit any such activity if fissionable material is produced incident to such activity, except as provided in sections 3 and 4. Nothing in this section shall be deemed to require a license for the conduct of research or development activities relating to the manufacture of such equipment or devices or the utilization of fissionable material or atomic energy, or for the manufacture or use of equipment or devices for medical therapy.

(b) Report to Congress: Whenever in its opinion any industrial, commercial, or other nonmilitary use of fissionable material or atomic energy has been sufficiently developed to be of practical value, the Commission shall prepare a report to the President stating all the facts with respect to such use, the Commission's estimate of the social, political, economic, and international effects of such use and the Commission's recommendations for necessary or desirable supplemental legislation. The President shall then transmit this report to the Congress, together with his recommendations. No license for any manufacture, production, export, or use shall be issued by the Commission under this section until after (1) a report with respect to such manufacture, production, export, or use has been filed with the Congress; and (2) a period of 90 days in which the Congress was in session has elapsed after the report has been so filed. In computing such period of 90 days, there shall be excluded the days on which either House is not in session because of an adjournment of more than 3 days.

(c) Issuance of licenses: After such 90-day period, unless hereafter prohibited by law, the Commission may license such manufacture, production, export, or use in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this act. The Commission is authorized and directed to issue licenses on a nonexclusive basis and to supply to the extent available appropriate quantities of fissionable material to licensees (1) whose proposed activities will serve some useful purpose proportionate to the quantities of fissionable material to be consumed; (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish;

and (3) who agree to make available to the Commission such technical information and data concerning their activities pursuant to such licenses as the Commission may determine necessary to encourage similar activities by as many licensees as possible. Each such license shall be issued for a specified period, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon the expiration of such period. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results. No license may be given to any persons for activities which are not under or within the jurisdiction of the United States, to any foreign government, or to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security.

(d) Byproduct power: If energy which may be utilized is produced in the production of fissionable material, such energy may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities under contracts providing for reasonable resale prices.

INTERNATIONAL ARRANGEMENTS

SEC. 8. (a) Definition: As used in this act, the term "international arrangement" shall mean any treaty approved by the Senate or international agreement hereafter approved by the Congress, during the time such treaty or agreement is in full force and effect.

(b) Effect of international arrangements: Any provision of this act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this act shall be deemed to be of no further force or effect.

(c) Policies contained in international arrangements: In the performance of its functions under this act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

PROPERTY OF THE COMMISSION

SEC. 9. (a) The President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in the following property:

(1) All fissionable material; all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable material or atomic energy; all processes and technical information of any kind, and the source thereof (including data, drawings, specifications, patents, patent applications, and other sources (relating to the processing, production, or utilization of fissionable material or atomic energy; and all contracts, agreements, leases, patents, applications for patents, inventions, and discoveries (whether patented or unpatented), and other rights of any kind concerning any such items;

(2) All facilities, equipment, and materials devoted primarily to atomic energy research and development; and

(3) Such other property owned by or in the custody or control of the Manhattan engineer district or other Government agencies as the President may determine.

(b) In order to render financial assistance to those States and localities in which the activities of the Commission are car-

ried on and in which the Commission has acquired property previously subject to State and local taxation, the Commission is authorized to make payments to State and local governments in lieu of property taxes. Such payments may be in the amounts, at the times, and upon the terms the Commission deems appropriate, but the Commission shall be guided by the policy of not making payments in excess of the taxes which would have been payable for such property in the condition in which it was acquired, except in cases where special burdens have been cast upon the State or local government by activities of the Commission, the Manhattan engineer district or their agents. In any such case, any benefit accruing to the State or local government by reason of such activities shall be considered in determining the amount of the payment. The Commission, and the property, activities, and income of the Commission, are hereby expressly exempted from taxation in any manner or form by any State, county, municipality, or any subdivision thereof.

CONTROL OF INFORMATION

SEC. 10. (a) Policy: It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy the Commission shall be guided by the following principles:

(1) That until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established, there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes; and

(2) That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.

(b) Restrictions:

(1) The term "restricted data" as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security.

(2) Whoever, lawfully or unlawfully, having possession of, access to, control over, or being entrusted with, any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data—

(A) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with intent to injure the United States or with intent to secure an advantage to any foreign nation, upon conviction thereof, shall be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than 20 years, or both;

(B) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with reason to believe such data will be utilized to injure the United States or to secure an advantage to any foreign nation, shall, upon conviction, be punished by a fine of not more than \$10,000 or imprisonment for not more than 10 years, or both.

(3) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, acquires or attempts or conspires to acquire any document, writing, sketch, photograph, plan,

model, instrument, appliance, note or information involving or incorporating restricted data shall, upon conviction thereof, be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than 20 years, or both.

(4) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, removes, conceals, tampers with, alters, mutilates, or destroys any document, writing, sketch, photograph, plan, model, instrument, appliance, or note involving or incorporating restricted data and used by any individual or person in connection with the production of fissionable material, or research or development relating to atomic energy, conducted by the United States, or financed in whole or in part by Federal funds, or conducted with the aid of fissionable material, shall be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than 20 years or both.

(5) (A) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States.

(B) (i) No arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person with whom such arrangement is made, the contractor or prospective contractor, or the prospective licensee agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security.

(ii) Except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individuals.

(iii) Notwithstanding the provisions of subparagraphs (i) and (ii), during such period of time after the enactment of this act as may be necessary to make the investigation, report, and determination required by such paragraphs, (a) any individual who was permitted access to restricted data by the Manhattan engineer district may be permitted access to restricted data and (b) the Commission may employ any individual who was employed by the Manhattan engineer district.

(iv) To protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the services of any Government agency to the extent he may deem necessary or desirable.

(C) All violations of this act shall be investigated by the Federal Bureau of Investigation of the Department of Justice.

(6) This section shall not exclude the applicable provisions of any other laws, except that no Government agency shall take any action under such other laws inconsistent with the provisions of this section.

(c) Inspections, records, and reports.—The Commission is—

(1) authorized by regulation or order to require such reports and the keeping of such records with respect to, and to provide for such inspections of, activities and studies of types specified in section 3 and of activities under licenses issued pursuant to section 7 as may be necessary to effectuate the purposes of this act;

(2) authorize and direct by regulation or order to require regular reports and records with respect to, and to provide for frequent inspections of, the production of fissionable material in the conduct of research and development activities.

PATENTS AND INVENTIONS

SEC. 11. (a) Production and military utilization:

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any patent granted for any such invention or discovery is hereby revoked, and just compensation shall be made therefor.

(2) No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(3) Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon shall file with the Commission a report containing a complete description thereof, unless such invention or discovery is described in an application for a patent filed in the Patent Office by such person within the time required for the filing of such report. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (A) The sixtieth day after the date of enactment of this act; (B) the sixtieth day after the completion of such invention or discovery; or (C) the sixtieth day after such person first discovers or first has reason to believe that such invention or discovery is useful in such production or utilization.

(b) Use of inventions for research: No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(c) Nonmilitary utilization:

(1) It shall be the duty of the Commission to declare any patent to be affected with the public interest if (A) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy; and (B) the licensing of such invention or discovery under this subsection is necessary to effectuate the policies and purposes of this act.

(2) Whenever any patent has been declared, pursuant to paragraph (1), to be affected with the public interest—

(A) The Commission is hereby licensed to use the invention or discovery covered by such patent in performing any of its powers under this act; and

(B) Any person to whom a license has been issued under section 7 is hereby licensed to

use the invention or discovery covered by such patent to the extent such invention or discovery is used by him in carrying on the activities authorized by his license under section 7.

The owner of the patent shall be entitled to a reasonable royalty fee for any use of an invention or discovery licensed by this subsection. Such royalty fee may be agreed upon by such owner and the licensee, or in the absence of such agreement shall be determined by the Commission.

(3) No court shall have jurisdiction or power to stay, restrain, or otherwise enjoin the use of any invention or discovery by a licensee, to the extent that such use is licensed by paragraph (2) above, on the ground of infringement of any patent. If in any action for infringement against such licensee the court shall determine that the defendant is exercising such license, the measure of damages shall be the royalty fee determined pursuant to this section, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court. If no royalty fee has been determined, the court shall stay the proceeding until the royalty fee is determined pursuant to this section. If any such licensee shall fail to pay such royalty fee, the patentee may bring an action in any court of competent jurisdiction for such royalty fee, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court.

(d) Acquisition of patents: The Commission is authorized to purchase, or to take, requisition, or condemn, and make just compensation for, (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or patent application covering any such invention or discovery. The Commissioner of Patents shall notify the Commission of all applications for patents heretofore or hereafter filed which in his opinion disclose such inventions or discoveries and shall provide the Commission access to all such applications.

(e) Compensation awards, and royalties:

(1) Patent Compensation Board: The Commission shall designate a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications under this subsection.

(2) Eligibility:

(A) Any owner of a patent licensed under subsection (c) (2) or any licensee thereunder may make application to the Commission for the determination of a reasonable royalty fee in accordance with such procedures as it by regulation may establish.

(B) Any person seeking to obtain the just compensation provided in subsections (a), (b), or (d) shall make application therefor to the Commission in accordance with such procedures as it may by regulation establish.

(c) Any person making any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon who is not entitled to compensation therefor under subsection (a) and who has complied with subsection (a) (3) above may make application to the Commission for, and the Commission may grant, an award.

(D) Any person making application under this subsection shall have the right to be represented by counsel.

(3) Standards:

(A) In determining such reasonable royalty fee, the Commission shall take into consideration any defense, general or special, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, such patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and may consider the

cost to the owner of the patent of developing such invention or discovery or acquiring such patent.

(B) In determining what constitutes just compensation under subsection (a), (b), or (d) above, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery, and may determine that such compensation be paid in periodic payments or in a lump sum.

(C) In determining the amount of any award under paragraph (2) (C) of this subsection, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery. Awards so made may be paid by the Commission in periodic payments or in a lump sum.

(4) Judicial review: Any person aggrieved by any determination of the Commission of an award or of a reasonable royalty fee may obtain a review of such determination in the Court of Appeals for the District of Columbia by filing in such court, within 30 days after notice of such determination, a written petition praying that such determination be set aside. A copy of such petition shall be forthwith served upon the Commission and thereupon the Commission shall file with the court a certified transcript of the entire record in the proceeding, including the findings and conclusions upon which the determination was based. Upon the filing of such transcript the court shall have exclusive jurisdiction upon the record certified to it to affirm the determination in its entirety or set it aside and remand it to the Commission for further proceedings. The findings of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. The court's judgment shall be final, subject, however, to review by the Supreme Court of the United States upon writ of certiorari on petition therefor under section 240 of the Judicial Code (U. S. C., title 28, sec. 347), by the Commission or any party to the court proceeding.

GENERAL AUTHORITY

Sec. 12. (a) In the performance of its functions the Commission is authorized to—

(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and by-product material as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this act, or in the administration or enforcement of this act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirement under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony Act of February 11, 1893 (U. S. C., title 49, sec. 46), shall apply with respect to any individual who specifically claims such privilege. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) appoint and fix the compensation of such officers and employees as may be necessary to carry out the functions of the Commission. Such officers and employees shall be appointed in accordance with the civil-

service laws and their compensation fixed in accordance with the Classification Act of 1923, as amended, except that to the extent the Commission deems such action necessary to the discharge of its responsibilities, personnel may be employed and their compensation fixed without regard to such laws. The Commission shall make adequate provision for administrative review of any determination to dismiss any employee;

(5) acquire such materials, property, equipment, and facilities, establish or construct such buildings and facilities, and modify such buildings and facilities from time to time as it may deem necessary, and construct, acquire, provide, or arrange for such facilities and services (at project sites where such facilities and services are not available) for the housing, health, safety, welfare, and recreation of personnel employed by the Commission as it may deem necessary;

(6) with the consent of the agency concerned, utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this act; and

(8) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) Security: The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

(c) Advisory committees: The members of the General Advisory Committee established pursuant to section 2 (b) and the members of advisory boards established pursuant to subsection (a) (1) of this section may serve as such without regard to the provisions of sections 109 and 113 of the Criminal Code (18 U. S. C., secs. 193 and 203) or section 19 (e) of the Contract Settlement Act of 1944, except insofar as such sections may prohibit any such member from receiving compensation in respect of any particular matter which directly involves the Commission or in which the Commission is directly interested.

COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

Sec. 13. (a) The United States shall make just compensation for any property or interests therein taken or requisitioned pursuant to sections 5 and 11. The Commission shall determine such compensation. If the compensation so determined is unsatisfactory to the person entitled thereto, such person shall be paid 50 percent of the amount so determined, and shall be entitled to sue the United States in the Court of Claims or in any district court of the United States in the manner provided by sections 24 (20) and 145 of the Judicial Code to recover such further sum as added to said 50 percent will make up such amount as will be just compensation.

(b) In the exercise of the rights of eminent domain and condemnation, proceedings may be instituted under the act of August 1, 1883 (U. S. C., title 40, sec. 257), or any other applicable Federal statute. Upon or after the filing of the condemnation petition, immediate possession may be taken and the property may be occupied, used, and improved for the purposes of this act, notwithstanding any other law. Real property acquired by purchase, donation, or other means of transfer may also be occupied, used, and improved

for the purposes of this act, prior to approval of title by the Attorney General.

JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

SEC. 14. (a) Notwithstanding the provisions of section 12 of the Administrative Procedure Act (Public Law 404, 79th Cong., approved June 11, 1946) which provide when such act shall take effect, section 10 of such act (relating to judicial review) shall be applicable, upon the enactment of this act, to any agency action under the authority of this act or by any agency created by or under the provisions of this act.

(b) Except as provided in subsection (a), no provision of this act shall be held to supersede or modify the provisions of the Administrative Procedure Act.

(c) As used in this section the terms "agency action" and "agency" shall have the same meaning as is assigned to such terms in the Administrative Procedure Act.

JOINT COMMITTEE ON ATOMIC ENERGY

SEC. 15. (a) There is hereby established a Joint Committee on Atomic Energy to be composed of nine Members of the Senate to be appointed by the President of the Senate, and nine Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. In each instance not more than five Members shall be members of the same political party.

(b) The joint committee shall make continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. The Commission shall keep the joint committee fully and currently informed with respect to the Commission's activities. All bills, resolutions, and other matters in the Senate or the House of Representatives relating primarily to the Commission or to the development, use, or control of atomic energy shall be referred to the joint committee. The members of the joint committee who are Members of the Senate shall from time to time report to the Senate, and the members of the joint committee who are Members of the House of Representatives shall from time to time report to the House, by bill or otherwise, their recommendations with respect to matters within the jurisdiction of their respective Houses which are (1) referred to the joint committee or (2) otherwise within the jurisdiction of the joint committee.

(c) Vacancies in the membership of the joint committee shall not affect the power of the remaining members to execute the functions of the joint committee, and shall be filled in the same manner as in the case of the original selection. The joint committee shall select a chairman and a vice chairman from among its members.

(d) The joint committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such places and times, to require, by subpoena or otherwise, the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words. The provisions of sections 102 to 104, inclusive, of the Revised Statutes shall apply in case of any failure of any witness to comply with a subpoena or to testify when summoned under authority of this section.

(e) The joint committee is empowered to appoint and fix the compensation of such experts, consultants, technicians, and clerical and stenographic assistants as it deems necessary and advisable, but the compensation so fixed shall not exceed the compensation prescribed under the Classification Act

of 1923, as amended, for comparable duties. The committee is authorized to utilize the services, information, facilities, and personnel of the departments and establishments of the Government.

ENFORCEMENT

SEC. 16. (a) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of sections 4 (b), 4 (e), 5 (a) (3), or 6 (b) shall, upon conviction thereof, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 5 years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or by imprisonment for not more than 20 years, or both.

(b) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this act other than those specified in subsection (a) and other than section 10 (b), or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (c), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than 2 years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than 20 years, or both.

(c) Whenever in the judgment of the Commission any person has engaged or is about to engage in any acts or practices which constitute or will constitute a violation of any provision of this act, or any regulation or order issued thereunder, it may make application to the appropriate court for an order enjoining such acts or practices, or for an order enforcing compliance with such provision, and upon a showing by the Commission that such person has engaged or is about to engage in any such acts or practices a permanent or temporary injunction, restraining order, or other order may be granted.

(d) In case of failure or refusal to obey a subpoena served upon any person pursuant to section 12 (a) (3), the district court for any district in which such person is found or resides or transacts business, upon application by the Commission, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear, and produce documents, or both, in accordance with the subpoena; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

REPORTS

SEC. 17. The Commission shall submit to the Congress, in January and July of each year, a report concerning the activities of the Commission. The Commission shall include in such report, and shall at such other times as it deems desirable submit to the Congress, such recommendations for additional legislation as the Commission deems necessary or desirable.

DEFINITIONS

SEC. 18. As used in this act—

(a) The term "atomic energy" shall be construed to mean all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation.

(b) The term "Government agency" means any executive department, commission, inde-

pendent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other establishment, in the executive branch of the Government.

(c) The term "person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent, or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions.

(d) The term "United States", when used in a geographical sense, includes all Territories and possessions of the United States and the Canal Zone.

(e) The term "research and development" means theoretical analysis, exploration, and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

(f) The term "equipment or device utilizing fissionable material or atomic energy" shall be construed to mean any equipment or device capable of making use of fissionable material or peculiarly adapted for making use of atomic energy and any important components by the Commission.

(g) The term "facilities for the production of fissionable material" shall be construed to mean any equipment or device capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission.

APPROPRIATIONS

SEC. 19. There are hereby authorized to be appropriated such sums as may be necessary and appropriate to carry out the provisions and purposes of this act. The acts appropriating such sums may appropriate specified portions thereof to be accounted for upon the certification of the Commission only. Funds appropriated to the Commission shall, if obligated by contract during the fiscal year for which appropriated, remain available for expenditure for 4 years following the expiration of the fiscal year for which appropriated. After such 4-year period, the unexpended balances of appropriations shall be carried to the surplus fund and covered into the Treasury.

SEPARABILITY OF PROVISIONS

SEC. 20. If any provision of this act, or the application of such provision to any person or circumstances, is held invalid, the remainder of this act or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SHORT TITLE

SEC. 21. This act may be cited as the "Atomic Energy Act of 1946."

EXECUTIVE SESSION

Mr. HILL. I move that the Senate proceed to consider executive business.

The motion was agreed to; and the Senate proceeded to the consideration of executive business.

EXECUTIVE MESSAGES REFERRED

The PRESIDENT pro tempore laid before the Senate messages from the President of the United States submitting sun-

dry nominations, which were referred to the appropriate committees.

(For nominations this day received, see the end of Senate proceedings.)

EXECUTIVE REPORTS OF A COMMITTEE

The following favorable reports of nominations were submitted:

By Mr. McCARRAN, from the Committee on the Judiciary:

George D. Neilson, of the District of Columbia, to be associate judge of the municipal court for the District of Columbia; and

Gerald R. Corbett, of Hawaii, to be sixth judge of the first circuit, circuit courts, Territory of Hawaii.

The PRESIDENT pro tempore. If there be no further reports of committees, the clerk will state the nominations on the Executive Calendar.

UNITED STATES DISTRICT JUDGE

The legislative clerk read the nomination of Richard Seymour Rodney to be United States district judge, district of Delaware.

The PRESIDENT pro tempore. Without objection, the nomination is confirmed.

OFFICE OF WAR MOBILIZATION AND RECONVERSION

The legislative clerk read the nomination of George H. Taylor, of Pennsylvania, to be a member of its advisory board (public member).

The PRESIDENT pro tempore. Without objection, the nomination is confirmed.

THE MARINE CORPS

The legislative clerk proceeded to read sundry nominations in the Marine Corps.

Mr. HILL. I ask that the nominations in the Marine Corps be confirmed en bloc.

The PRESIDENT pro tempore. Without objection, the nominations are confirmed en bloc.

That completes the Executive Calendar.

Mr. HILL. I ask that the President be immediately notified of all nominations this day confirmed.

The PRESIDENT pro tempore. Without objection, the President will be so notified.

ADJOURNMENT TO MONDAY

Mr. HILL. As in legislative session, I move that the Senate adjourn until Monday next.

The motion was agreed to; and (at 5 o'clock and 12 minutes p. m.) the Senate adjourned until Monday, July 29, 1946, at 12 o'clock meridian.

NOMINATIONS

Executive nominations received by the Senate July 27 (legislative day of July 5), 1946:

DIPLOMATIC AND FOREIGN SERVICE

The following-named persons to be Foreign Service officers, unclassified, vice consuls of career, and secretaries in the Diplomatic Service of the United States of America:

John M. Kavanaugh, of Louisiana.
Stephen A. Koczak, of New Jersey.
David J. S. Manbey, of California.
David E. Mark, of New York.

OFFICE OF PRICE ADMINISTRATION

The following-named persons to be members of the Price Decontrol Board:

Roy L. Thompson, of Louisiana.
Daniel W. Bell, of the District of Columbia.
George H. Mead, of Ohio.

UNITED STATES PUBLIC HEALTH SERVICE

The following-named candidates for appointments and promotions in the Regular Corps of the United States Public Health Service:

TO BE SENIOR ASSISTANT DENTAL SURGEONS, EFFECTIVE DATE OF OATH OF OFFICE

John W. Holt
Joseph G. Yount

SURGEONS TO BE SENIOR SURGEONS

Frank S. Fellows
Ralph B. Snavelly

SENIOR DENTAL SURGEON TO BE DENTAL DIRECTOR

Daniel B. Newell

SENIOR SANITARY ENGINEERS TO BE SANITARY ENGINEER DIRECTORS

Arthur P. Miller Edmund C. Sullivan
Frederic J. Moss Arthur L. Dopmeyer

IN THE NAVY

The following-named officers for appointment in the United States Navy in the corps, grades, and ranks hereinafter stated:

The following-named officers to the ranks indicated in the line of the Navy:

(Asterisk (*) indicates officers to be designated for EDO and SDO subsequent to acceptance of appointment.)

TO BE LIEUTENANT COMMANDERS

*Eugene T. Aldridge William C. Jennings
Rowland H. Groff Chester A. Kunz
Leonard B. Jaudon

TO BE LIEUTENANTS

*Andrew M. R. Fitzsimmons Sam A. Lief
Walton B. Hinds William E. H. Miller
*Wallace H. Howe Edgar K. Thompson
Alexander Jackson, Jr. Philip A. Walker
Alexander Kusebauch John M. Wyckoff

TO BE LIEUTENANTS (JUNIOR GRADE)

*Charles L. D. Allen *Lawrence W. Gunther
*Peter Bellin *John A. Gustavsen
*William B. Bernard Jack W. Hammer
George W. Bowdley *Wilfred A. Hearn
Carl R. Bower William C. Howes
James S. Brown John E. Johansen
Charles Buifinch Arthur R. Johnson
*Clarence F. Clark Philip P. Linder
*Edward G. Conroy *George J. Noack
*John M. Court Ellsworth N. Smith
*Benjamin O. Delaney Wyndham R. Whitley
William P. Flanagan Franklyn K. Zinn
Frank L. Fullaway

TO BE ENSIGNS

Donald L. Abbott Gordon R. Barnett
William H. Abney Reginald L. Barrington
John P. Ackerman Leonard F. Barton
James H. Agles George B. Bates, Jr.
Robert J. Agness *Edwin J. Bath
Michael S. Alexatos Charles B. Bauer
Harry G. Alleman Thomas J. Baxter, Jr.
Gale W. Allen William C. Bayer
Irl J. Allison Garnet C. Beard
*Dominic Amara Luther G. Bearden
Donald A. Anderson Thomas J. Bedford
Martin J. Andrew Hubert C. Behner, Jr.
Zenas B. Andrews Herbert A. Behre, Jr.
Robert Appe James L. Bell
Waldo A. Atkins Jack W. Bennett
James R. Bagshaw 3d Jack Bent
Charles L. Bailey John J. Berchman, Jr.
William F. Baker, Jr. Joseph C. Berriman
Louis L. Bangs Richard Beynon, Jr.
Howard C. Bardsley Richard N. Billings
Kenneth P. Barden James R. Bird
Norwood R. Barfield Frank J. Birkenbach

Edward J. Bislar Stanley M. Dunn
Rogers L. Black John A. D'Zamba
Roy Blackwood, Jr. Jack R. Eberley
John A. Blair Sidney Edelman
Hulon R. Blakeney Sam E. Edelstein, Jr.
John W. Blanton William O. Edlun
*Thomas N. Blockwick Reginald W. Ensminger, Jr.
Casper R. Boehm Ralph D. Ettinger
Boyd L. Booth Floyd F. Favreau
John R. Bowen, II John W. Ferrill
*Ralph K. Brandt Thomas Fields
James R. Branscome James W. Findling
Chester A. Briggs Christian Fink
Rufus T. Brinn Richard Flournoy, Jr.
James O. Brockman Robert D. Flynn
Jr. Gayle C. Foltz
Bobby C. Brogoitti David L. Forrester, Jr.
Robert R. Brouillette Francis M. Fox, Jr.
Russell E. Brown John P. Fox, Jr.
William T. Brown, Jr. Bernard Frankel
Charles K. Brust, Jr. Leon H. Freeman
William A. Bryant, Jr. James N. Fritze
Wallace P. Buerschinger Robert S. Frostad
Marlon R. Gallagher
Robert C. Burnett Arthur E. Gargas
William S. Butler Ronald M. Garner
*Joseph F. Calabrese Paul C. Garofalo
Melvin E. Call Warren H. Gathje
*William F. Callaway Elphege A. M. Gendreau, Jr.
Robert "H" Campbell Edgar L. George
Daniel S. Capozzalo Thomas R. Gibson 3d
Edward F. Carl Charles L. Gillis
Harry T. Carmody *Albert S. Giorgis
Edward L. Carpenter William R. Glaser
Victor M. Cassata Dewitt L. Glover
Carl Chance Theodore H. Glover
Robert S. Chaney Loren D. Goetz
Francis J. Chester Maurice Goldstein
William J. Childs John T. Gordon
Dallis J. Christensen Gordon F. Gossman
Donald L. Christlanson Lionel J. Goulet
Laurence R. Chute Martin C. Graham, Jr.
John L. Clarke, Jr. John A. Gray, Jr.
Paul K. Clausen Samuel W. Green
James W. Clemans *Albert Greenberg
Carl W. Coe El Carol W. Greenwood
George M. Cohan, Jr. Charles D. Griffin
William W. Coleman Shade W. Griffin
Lawrence D. Condon George V. Gross
Lawrence F. Cooney, Jr. Joseph B. Grotts
Charles W. Cooper Robert L. Hagedorn
Thomas V. Cooper Thomas C. Halloran
William B. Coley Charles F. Harding, Jr.
La Fay R. Corcoran *James D. Hare
*William J. Corcoran Fred R. Harkness
Howard L. Cornish Ramey W. Harper
Romolo Cousins Daniel F. Harrington, Jr.
James M. Cowart Jr.
*James H. Crawford, Jr. Cecil E. Harris
Joseph E. Crawford, Jr. Jack H. Harrison
Louis B. Crayton, Jr. Robert F. Harrison
Albert E. Cronin, Jr. Benjamin Hashmall
Frank W. Crook Franklin C. Havens, Jr.
Thomas H. Crowe Cecil L. Haverty
William F. Cuiley James P. Hayes
James J. Currie Jack F. Heard
*Eugene N. Curtis Le Roy A. Heath
Robert L. Dahllof Francis Heffernan
Joseph A. Dalgie *Jack "C" Heishman
Arthur H. Damon, Jr. Charles C. Henderson
Henry H. Dams John S. Herman
Robert J. Danforth Harvey S. Herrick
Lawrence F. Danz William J. Hewlitt
Harold W. Davidson John T. Hickey
Willard H. Davidson Charles E. Hilgel
Clifford Deets Harry E. Hill
Jack R. De Leonardis *Harold O. Hilmar
Leland S. Denning *William B. Hirst, Jr.
Wallace E. Derryberry Magnus W. Hjalmarson
William B. Dever Trygve A. Holl
*Thornwell M. Dillard Audley W. Holmes
John Dooley James L. Hooper
James W. Dowell Frederick H. Hopp
*Fordyce R. Downs, Jr. Maurice A. Horn
Richard N. Doyle
Eugene E. Drinkwater
Derwood D. Duncan

[PUBLIC LAW 585—79TH CONGRESS]

[CHAPTER 724—2D SESSION]

[S. 1717]

AN ACT

For the development and control of atomic energy.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

DECLARATION OF POLICY

SECTION 1. (a) FINDINGS AND DECLARATION.—Research and experimentation in the field of nuclear chain reaction have attained the stage at which the release of atomic energy on a large scale is practical. The significance of the atomic bomb for military purposes is evident. The effect of the use of atomic energy for civilian purposes upon the social, economic, and political structures of today cannot now be determined. It is a field in which unknown factors are involved. Therefore, any legislation will necessarily be subject to revision from time to time. It is reasonable to anticipate, however, that tapping this new source of energy will cause profound changes in our present way of life. Accordingly, it is hereby declared to be the policy of the people of the United States that, subject at all times to the paramount objective of assuring the common defense and security, the development and utilization of atomic energy shall, so far as practicable, be directed toward improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace.

(b) PURPOSE OF ACT.—It is the purpose of this Act to effectuate the policies set out in section 1 (a) by providing, among others, for the following major programs relating to atomic energy:

(1) A program of assisting and fostering private research and development to encourage maximum scientific progress;

(2) A program for the control of scientific and technical information which will permit the dissemination of such information to encourage scientific progress, and for the sharing on a reciprocal basis of information concerning the practical industrial application of atomic energy as soon as effective and enforceable safeguards against its use for destructive purposes can be devised;

(3) A program of federally conducted research and development to assure the Government of adequate scientific and technical accomplishment;

(4) A program for Government control of the production, ownership, and use of fissionable material to assure the common defense and security and to insure the broadest possible exploitation of the fields; and

(5) A program of administration which will be consistent with the foregoing policies and with international arrangements made by the

United States, and which will enable the Congress to be currently informed so as to take further legislative action as may hereafter be appropriate.

ORGANIZATION

SEC. 2. (a) ATOMIC ENERGY COMMISSION.—

(1) There is hereby established an Atomic Energy Commission (herein called the Commission), which shall be composed of five members. Three members shall constitute a quorum of the Commission. The President shall designate one member as Chairman of the Commission.

(2) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate. In submitting any nomination to the Senate, the President shall set forth the experience and the qualifications of the nominee. The term of office of each member of the Commission taking office prior to the expiration of two years after the date of enactment of this Act shall expire upon the expiration of such two years. The term of office of each member of the Commission taking office after the expiration of two years from the date of enactment of this Act shall be five years, except that (A) the terms of office of the members first taking office after the expiration of two years from the date of enactment of this Act shall expire, as designated by the President at the time of appointment, one at the end of three years, one at the end of four years, one at the end of five years, one at the end of six years, and one at the end of seven years, after the date of enactment of this Act; and (B) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term. Any member of the Commission may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. Each member, except the Chairman, shall receive compensation at the rate of \$15,000 per annum; and the Chairman shall receive compensation at the rate of \$17,500 per annum. No member of the Commission shall engage in any other business, vocation, or employment than that of serving as a member of the Commission.

(3) The principal office of the Commission shall be in the District of Columbia, but the Commission or any duly authorized representative may exercise any or all of its powers in any place. The Commission shall hold such meetings, conduct such hearings, and receive such reports as may be necessary to enable it to carry out the provisions of this Act.

(4) There are hereby established within the Commission—

(A) a General Manager, who shall discharge such of the administrative and executive functions of the Commission as the Commission may direct. The General Manager shall be appointed by the President by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$15,000 per annum. The Commission may make recommendations to the President with respect to the appointment or removal of the General Manager.

(B) a Division of Research, a Division of Production, a Division of Engineering, and a Division of Military Application.

Each division shall be under the direction of a Director who shall be appointed by the Commission, and shall receive compensation at the rate of \$14,000 per annum. The Director of the Division of Military Application shall be a member of the armed forces. The Commission shall require each such division to exercise such of the Commission's powers under this Act as the Commission may determine, except that the authority granted under section 3 (a) of this Act shall not be exercised by the Division of Research.

(b) **GENERAL ADVISORY COMMITTEE.**—There shall be a General Advisory Committee to advise the Commission on scientific and technical matters relating to materials, production, and research and development, to be composed of nine members, who shall be appointed from civilian life by the President. Each member shall hold office for a term of six years, except that (1) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed, shall be appointed for the remainder of such term; and (2) the terms of office of the members first taking office after the date of the enactment of this Act shall expire, as designated by the President at the time of appointment, three at the end of two years, three at the end of four years, and three at the end of six years, after the date of the enactment of this Act. The Committee shall designate one of its own members as Chairman. The Committee shall meet at least four times in every calendar year. The members of the Committee shall receive a per diem compensation of \$50 for each day spent in meetings or conferences, and all members shall receive their necessary traveling or other expenses while engaged in the work of the Committee.

(c) **MILITARY LIAISON COMMITTEE.**—There shall be a Military Liaison Committee consisting of representatives of the Departments of War and Navy, detailed or assigned thereto, without additional compensation, by the Secretaries of War and Navy in such number as they may determine. The Commission shall advise and consult with the Committee on all atomic energy matters which the Committee deems to relate to military applications, including the development, manufacture, use, and storage of bombs, the allocation of fissionable material for military research, and the control of information relating to the manufacture or utilization of atomic weapons. The Commission shall keep the Committee fully informed of all such matters before it and the Committee shall keep the Commission fully informed of all atomic energy activities of the War and Navy Departments. The Committee shall have authority to make written recommendations to the Commission on matters relating to military applications from time to time as it may deem appropriate. If the Committee at any time concludes that any action, proposed action, or failure to act of the Commission on such matters is adverse to the responsibilities of the Departments of War or Navy, derived from the Constitution, laws, and treaties, the Committee may refer such action, proposed action, or failure to act to the Secretaries of War and Navy. If either Secretary concurs, he may refer the matter to the President, whose decision shall be final.

(d) **APPOINTMENT OF ARMY AND NAVY OFFICERS.**—Notwithstanding the provisions of section 1222 of the Revised Statutes (U. S. C., 1940 edition, title 10, sec. 576), section 212 of the Act entitled "An Act making appropriations for the Legislative Branch of the Government

for the fiscal year ending June 30, 1933, and for other purposes", approved June 30, 1932, as amended (U. S. C., 1940 edition, title 5, sec. 59a), section 2 of the Act entitled "An Act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-five, and for other purposes", approved July 31, 1894, as amended (U. S. C., 1940 edition, title 5, sec. 62), or any other law, any active or retired officer of the Army or the Navy may serve as Director of the Division of Military Application established by subsection (a) (4) (B) of this section, without prejudice to his commissioned status as such officer. Any such officer serving as Director of the Division of Military Application shall receive, in addition to his pay from the United States as such officer, an amount equal to the difference between such pay and the compensation prescribed in subsection (a) (4) (B) of this section.

RESEARCH

SEC. 3. (a) **RESEARCH ASSISTANCE.**—The Commission is directed to exercise its powers in such manner as to insure the continued conduct of research and development activities in the fields specified below by private or public institutions or persons and to assist in the acquisition of an ever-expanding fund of theoretical and practical knowledge in such fields. To this end the Commission is authorized and directed to make arrangements (including contracts, agreements, and loans) for the conduct of research and development activities relating to—

- (1) nuclear processes;
- (2) the theory and production of atomic energy, including processes, materials, and devices related to such production;
- (3) utilization of fissionable and radioactive materials for medical, biological, health, or military purposes;
- (4) utilization of fissionable and radioactive materials and processes entailed in the production of such materials for all other purposes, including industrial uses; and
- (5) the protection of health during research and production activities.

The Commission may make such arrangements without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and may make partial and advance payments under such arrangements, and may make available for use in connection therewith such of its equipment and facilities as it may deem desirable. Such arrangements shall contain such provisions to protect health, to minimize danger from explosion and other hazards to life or property, and to require the reporting and to permit the inspection of work performed thereunder, as the Commission may determine; but shall not contain any provisions or conditions which prevent the dissemination of scientific or technical information, except to the extent such dissemination is prohibited by law.

(b) **RESEARCH BY THE COMMISSION.**—The Commission is authorized and directed to conduct, through its own facilities, activities and studies of the types specified in subsection (a) above.

PRODUCTION OF FISSIONABLE MATERIAL

SEC. 4. (a) DEFINITION.—As used in this Act, the term “produce”, when used in relation to fissionable material, means to manufacture, produce, or refine fissionable material, as distinguished from source materials as defined in section 5 (b) (1), or to separate fissionable material from other substances in which such material may be contained or to produce new fissionable material.

(b) PROHIBITION.—It shall be unlawful for any person to own any facilities for the production of fissionable material or for any person to produce fissionable material, except to the extent authorized by subsection (c).

(c) OWNERSHIP AND OPERATION OF PRODUCTION FACILITIES.—

(1) OWNERSHIP OF PRODUCTION FACILITIES.—The Commission, as agent of and on behalf of the United States, shall be the exclusive owner of all facilities for the production of fissionable material other than facilities which (A) are useful in the conduct of research and development activities in the fields specified in section 3, and (B) do not, in the opinion of the Commission, have a potential production rate adequate to enable the operator of such facilities to produce within a reasonable period of time a sufficient quantity of fissionable material to produce an atomic bomb or any other atomic weapon.

(2) OPERATION OF THE COMMISSION'S PRODUCTION FACILITIES.—The Commission is authorized and directed to produce or to provide for the production of fissionable material in its own facilities. To the extent deemed necessary, the Commission is authorized to make, or to continue in effect, contracts with persons obligating them to produce fissionable material in facilities owned by the Commission. The Commission is also authorized to enter into research and development contracts authorizing the contractor to produce fissionable material in facilities owned by the Commission to the extent that the production of such fissionable material may be incident to the conduct of research and development activities under such contracts. Any contract entered into under this section shall contain provisions (A) prohibiting the contractor with the Commission from subcontracting any part of the work he is obligated to perform under the contract, except as authorized by the Commission, and (B) obligating the contractor to make such reports to the Commission as it may deem appropriate with respect to his activities under the contract, to submit to frequent inspection by employees of the Commission of all such activities, and to comply with all safety and security regulations which may be prescribed by the Commission. Any contract made under the provisions of this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under such contracts. The President shall determine at least once each year the quantities of fissionable material to be produced under this paragraph.

(3) OPERATION OF OTHER PRODUCTION FACILITIES.—Fissionable material may be produced in the conduct of research and development activities in facilities which, under paragraph (1) above, are not required to be owned by the Commission.

(d) IRRADIATION OF MATERIALS.—For the purpose of increasing the supply of radioactive materials, the Commission and persons lawfully producing or utilizing fissionable material are authorized to expose materials of any kind to the radiation incident to the processes of producing or utilizing fissionable material.

(e) MANUFACTURE OF PRODUCTION FACILITIES.—Unless authorized by a license issued by the Commission, no person may manufacture, produce, transfer, or acquire any facilities for the production of fissionable material. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish and shall be issued in accordance with such standards and upon such conditions as will restrict the production and distribution of such facilities to effectuate the policies and purposes of this Act. Nothing in this section shall be deemed to require a license for such manufacture, production, transfer, or acquisition incident to or for the conduct of research or development activities in the United States of the types specified in section 3, or to prohibit the Commission from manufacturing or producing such facilities for its own use.

CONTROL OF MATERIALS

SEC. 5. (a) FISSIONABLE MATERIALS.—

() DEFINITION.—As used in this Act, the term “fissionable material” means plutonium, uranium enriched in the isotope 235, any other material which the Commission determines to be capable of releasing substantial quantities of energy through nuclear chain reaction of the material, or any material artificially enriched by any of the foregoing; but does not include source materials, as defined in section 5 (b) (1).

(2) GOVERNMENT OWNERSHIP OF ALL FISSIONABLE MATERIAL.—All right, title, and interest within or under the jurisdiction of the United States, in or to any fissionable material, now or hereafter produced, shall be the property of the Commission, and shall be deemed to be vested in the Commission by virtue of this Act. Any person owning any interest in any fissionable material at the time of the enactment of this Act, or owning any interest in any material at the time when such material is hereafter determined to be a fissionable material, or who lawfully produces any fissionable material incident to privately financed research or development activities, shall be paid just compensation therefor. The Commission may, by action consistent with the provisions of paragraph (4) below, authorize any such person to retain possession of such fissionable material, but no person shall have any title in or to any fissionable material.

(3) PROHIBITION.—It shall be unlawful for any person, after sixty days from the effective date of this Act to (A) possess or transfer any fissionable material, except as authorized by the Commission, or (B) export from or import into the United States any fissionable material, or (C) directly or indirectly engage in the production of any fissionable material outside of the United States.

(4) DISTRIBUTION OF FISSIONABLE MATERIAL.—Without prejudice to its continued ownership thereof, the Commission is authorized to

distribute fissionable material owned by it, with or without charge, to applicants requesting such material (A) for the conduct of research or development activities either independently or under contract or other arrangement with the Commission, (B) for use in medical therapy, or (C) for use pursuant to a license issued under the authority of section 7. Such material shall be distributed in such quantities and on such terms that no applicant will be enabled to obtain an amount sufficient to construct a bomb or other military weapon. The Commission is directed to distribute sufficient fissionable material to permit the conduct of widespread independent research and development activity, to the maximum extent practicable. In determining the quantities of fissionable material to be distributed, the Commission shall make such provisions for its own needs and for the conservation of fissionable material as it may determine to be necessary in the national interest for the future development of atomic energy. The Commission shall not distribute any material to any applicant, and shall recall any distributed material from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as may be established by the Commission, or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(5) The Commission is authorized to purchase or otherwise acquire any fissionable material or any interest therein outside the United States, or any interest in facilities for the production of fissionable material, or in real property on which such facilities are located, without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made under contracts for such purposes. The Commission is further authorized to take, requisition, or condemn, or otherwise acquire any interest in such facilities or real property, and just compensation shall be made therefor.

(b) SOURCE MATERIALS.—

(1) DEFINITION.—As used in this Act, the term "source material" means uranium, thorium, or any other material which is determined by the Commission, with the approval of the President, to be peculiarly essential to the production of fissionable materials; but includes ores only if they contain one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

(2) LICENSE FOR TRANSFERS REQUIRED.—Unless authorized by a license issued by the Commission, no person may transfer or deliver, receive possession of or title to, or export from the United States any source material after removal from its place of deposit in nature, except that licenses shall not be required for quantities of source materials which, in the opinion of the Commission, are unimportant.

(3) ISSUANCE OF LICENSES.—The Commission shall establish such standards for the issuance, refusal, or revocation of licenses as it may deem necessary to assure adequate source materials for production, research, or development activities pursuant to this Act or to prevent

the use of such materials in a manner inconsistent with the national welfare. Licenses shall be issued in accordance with such procedures as the Commission may by regulation establish.

(4) **REPORTING.**—The Commission is authorized to issue such regulations or orders requiring reports of ownership, possession, extraction, refining, shipment, or other handling of source materials as it may deem necessary, except that such reports shall not be required with respect to (A) any source material prior to removal from its place of deposit in nature, or (B) quantities of source materials which in the opinion of the Commission are unimportant or the reporting of which will discourage independent prospecting for new deposits.

(5) **ACQUISITION.**—The Commission is authorized and directed to purchase, take, requisition, condemn, or otherwise acquire, supplies of source materials or any interest in real property containing deposits of source materials to the extent it deems necessary to effectuate the provisions of this Act. Any purchase made under this paragraph may be made without regard to the provisions of section 3709 of the Revised Statutes (U. S. C., title 41, sec. 5) upon certification by the Commission that such action is necessary in the interest of the common defense and security, or upon a showing that advertising is not reasonably practicable, and partial and advance payments may be made thereunder. The Commission may establish guaranteed prices for all source materials delivered to it within a specified time. Just compensation shall be made for any property taken, requisitioned, or condemned under this paragraph.

(6) **EXPLORATION.**—The Commission is authorized to conduct and enter into contracts for the conduct of exploratory operations, investigations, and inspections to determine the location, extent, mode of occurrence, use, or conditions of deposits or supplies of source materials, making just compensation for any damage or injury occasioned thereby. Such exploratory operations may be conducted only with the consent of the owner, but such investigations and inspections may be conducted with or without such consent.

(7) **PUBLIC LANDS.**—All uranium, thorium, and all other materials determined pursuant to paragraph (1) of this subsection to be peculiarly essential to the production of fissionable material, contained, in whatever concentration, in deposits in the public lands are hereby reserved for the use of the United States subject to valid claims, rights, or privileges existing on the date of the enactment of this Act: *Provided, however,* That no individual, corporation, partnership, or association, which had any part, directly or indirectly, in the development of the atomic bomb project, may benefit by any location, entry, or settlement upon the public domain made after such individual, corporation, partnership, or association took part in such project, if such individual, corporation, partnership, or association, by reason of having had such part in the development of the atomic bomb project, acquired confidential official information as to the existence of deposits of such uranium, thorium, or other materials in the specific lands upon which such location, entry, or settlement is made, and subsequent to the date of the enactment of this Act made such location, entry, or settlement or caused the same to be made for his, its, or their benefit. The Secretary of the Interior shall cause to be inserted in every patent, conveyance, lease, permit, or other authorization hereafter granted to use the public lands or their mineral resources,

under any of which there might result the extraction of any materials so reserved, a reservation to the United States of all such materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same, making just compensation for any damage or injury occasioned thereby. Any lands so patented, conveyed, leased, or otherwise disposed of may be used, and any rights under any such permit or authorization may be exercised, as if no reservation of such materials had been made under this subsection; except that, when such use results in the extraction of any such material from the land in quantities which may not be transferred or delivered without a license under this subsection, such material shall be the property of the Commission and the Commission may require delivery of such material to it by any possessor thereof after such material has been separated as such from the ores in which it was contained. If the Commission requires the delivery of such material to it, it shall pay to the person mining or extracting the same, or to such other person as the Commission determines to be entitled thereto, such sums, including profits, as the Commission deems fair and reasonable for the discovery, mining, development, production, extraction, and other services performed with respect to such material prior to such delivery, but such payment shall not include any amount on account of the value of such material before removal from its place of deposit in nature. If the Commission does not require delivery of such material to it, the reservation made pursuant to this paragraph shall be of no further force or effect.

(c) **BYPRODUCT MATERIALS.**—

(1) **DEFINITION.**—As used in this Act, the term “byproduct material” means any radioactive material (except fissionable material) yielded in or made radioactive by exposure to the radiation incident to the processes of producing or utilizing fissionable material.

(2) **DISTRIBUTION.**—The Commission is authorized to distribute, with or without charge, byproduct materials to applicants seeking such materials for research or development activity, medical therapy, industrial uses, or such other useful applications as may be developed. In distributing such materials, the Commission shall give preference to applicants proposing to use such materials in the conduct of research and development activity or medical therapy. The Commission shall not distribute any byproduct materials to any applicant, and shall recall any distributed materials from any applicant, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such materials in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor.

(d) **GENERAL PROVISIONS.**—The Commission shall not—

(1) distribute any fissionable material to (A) any person for a use which is not under or within the jurisdiction of the United States, (B) any foreign government, or (C) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.

(2) license any person to transfer or deliver, receive possession of or title to, or export from the United States any source material if, in the opinion of the Commission, the issuance of a license to such person for such purpose would be inimical to the common defense and security.

MILITARY APPLICATIONS OF ATOMIC ENERGY

SEC. 6 (a) AUTHORITY.—The Commission is authorized to—

(1) conduct experiments and do research and development work in the military application of atomic energy; and

(2) engage in the production of atomic bombs, atomic bomb parts, or other military weapons utilizing fissionable materials; except that such activities shall be carried on only to the extent that the express consent and direction of the President of the United States has been obtained, which consent and direction shall be obtained at least once each year.

The President from time to time may direct the Commission (1) to deliver such quantities of fissionable materials or weapons to the armed forces for such use as he deems necessary in the interest of national defense or (2) to authorize the armed forces to manufacture, produce, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon.

(b) PROHIBITION.—It shall be unlawful for any person to manufacture, produce, transfer, or acquire any equipment or device utilizing fissionable material or atomic energy as a military weapon, except as may be authorized by the Commission. Nothing in this subsection shall be deemed to modify the provisions of section 4 of this Act, or to prohibit research activities in respect of military weapons, or to permit the export of any such equipment or device.

UTILIZATION OF ATOMIC ENERGY

SEC. 7. (a) LICENSE REQUIRED.—It shall be unlawful, except as provided in sections 5 (a) (4) (A) or (B) or 6 (a), for any person to manufacture, produce, or export any equipment or device utilizing fissionable material or atomic energy or to utilize fissionable material or atomic energy with or without such equipment or device, except under and in accordance with a license issued by the Commission authorizing such manufacture, production, export, or utilization. No license may permit any such activity if fissionable material is produced incident to such activity, except as provided in sections 3 and 4. Nothing in this section shall be deemed to require a license for the conduct of research or development activities relating to the manufacture of such equipment or devices or the utilization of fissionable material or atomic energy, or for the manufacture or use of equipment or devices for medical therapy.

(b) REPORT TO CONGRESS.—Whenever in its opinion any industrial, commercial, or other nonmilitary use of fissionable material or atomic energy has been sufficiently developed to be of practical value, the Commission shall prepare a report to the President stating all the facts with respect to such use, the Commission's estimate of the social, political, economic, and international effects of such use and the Commission's recommendations for necessary or desirable supplemental legislation. The President shall then transmit this report to the

Congress together with his recommendations. No license for any manufacture, production, export, or use shall be issued by the Commission under this section until after (1) a report with respect to such manufacture, production, export, or use has been filed with the Congress; and (2) a period of ninety days in which the Congress was in session has elapsed after the report has been so filed. In computing such period of ninety days, there shall be excluded the days on which either House is not in session because of an adjournment of more than three days.

(c) **ISSUANCE OF LICENSES.**—After such ninety-day period, unless hereafter prohibited by law, the Commission may license such manufacture, production, export, or use in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this Act. The Commission is authorized and directed to issue licenses on a nonexclusive basis and to supply to the extent available appropriate quantities of fissionable material to licensees (1) whose proposed activities will serve some useful purpose proportionate to the quantities of fissionable material to be consumed; (2) who are equipped to observe such safety standards to protect health and to minimize danger from explosion or other hazard to life or property as the Commission may establish; and (3) who agree to make available to the Commission such technical information and data concerning their activities pursuant to such licenses as the Commission may determine necessary to encourage similar activities by as many licensees as possible. Each such license shall be issued for a specified period, shall be revocable at any time by the Commission in accordance with such procedures as the Commission may establish, and may be renewed upon the expiration of such period. Where activities under any license might serve to maintain or to foster the growth of monopoly, restraint of trade, unlawful competition, or other trade position inimical to the entry of new, freely competitive enterprises in the field, the Commission is authorized and directed to refuse to issue such license or to establish such conditions to prevent these results as the Commission, in consultation with the Attorney General, may determine. The Commission shall report promptly to the Attorney General any information it may have with respect to any utilization of fissionable material or atomic energy which appears to have these results. No license may be given to any person for activities which are not under or within the jurisdiction of the United States, to any foreign government, or to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security.

(d) **BYPRODUCT POWER.**—If energy which may be utilized is produced in the production of fissionable material, such energy may be used by the Commission, transferred to other Government agencies, or sold to public or private utilities under contracts providing for reasonable resale prices.

INTERNATIONAL ARRANGEMENTS

SEC. 8. (a) DEFINITION.—As used in this Act, the term “international arrangement” shall mean any treaty approved by the Senate or international agreement hereafter approved by the Congress, during the time such treaty or agreement is in full force and effect.

(b) **EFFECT OF INTERNATIONAL ARRANGEMENTS.**—Any provision of this Act or any action of the Commission to the extent that it conflicts with the provisions of any international arrangement made after the date of enactment of this Act shall be deemed to be of no further force or effect.

(c) **POLICIES CONTAINED IN INTERNATIONAL ARRANGEMENTS.**—In the performance of its functions under this Act, the Commission shall give maximum effect to the policies contained in any such international arrangement.

PROPERTY OF THE COMMISSION

SEC. 9. (a) The President shall direct the transfer to the Commission of all interests owned by the United States or any Government agency in the following property:

(1) All fissionable material; all atomic weapons and parts thereof; all facilities, equipment, and materials for the processing, production, or utilization of fissionable material or atomic energy; all processes and technical information of any kind, and the source thereof (including data, drawings, specifications, patents, patent applications, and other sources (relating to the processing, production, or utilization of fissionable material or atomic energy; and all contracts, agreements, leases, patents, applications for patents, inventions and discoveries (whether patented or unpatented), and other rights of any kind concerning any such items;

(2) All facilities, equipment, and materials, devoted primarily to atomic energy research and development; and

(3) Such other property owned by or in the custody or control of the Manhattan Engineer District or other Government agencies as the President may determine.

(b) In order to render financial assistance to those States and localities in which the activities of the Commission are carried on and in which the Commission has acquired property previously subject to State and local taxation, the Commission is authorized to make payments to State and local governments in lieu of property taxes. Such payments may be in the amounts, at the times, and upon the terms the Commission deems appropriate, but the Commission shall be guided by the policy of not making payments in excess of the taxes which would have been payable for such property in the condition in which it was acquired, except in cases where special burdens have been cast upon the State or local government by activities of the Commission, the Manhattan Engineer District or their agents. In any such case, any benefit accruing to the State or local government by reason of such activities shall be considered in determining the amount of the payment. The Commission, and the property, activities, and income of the Commission, are hereby expressly exempted from taxation in any manner or form by any State, county, municipality, or any subdivision thereof.

CONTROL OF INFORMATION

SEC. 10. (a) **POLICY.**—It shall be the policy of the Commission to control the dissemination of restricted data in such a manner as to assure the common defense and security. Consistent with such policy, the Commission shall be guided by the following principles:

(1) That until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established, there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes; and

(2) That the dissemination of scientific and technical information relating to atomic energy should be permitted and encouraged so as to provide that free interchange of ideas and criticisms which is essential to scientific progress.

(b) RESTRICTIONS.—

(1) The term “restricted data” as used in this section means all data concerning the manufacture or utilization of atomic weapons, the production of fissionable material, or the use of fissionable material in the production of power, but shall not include any data which the Commission from time to time determines may be published without adversely affecting the common defense and security.

(2) Whoever, lawfully or unlawfully, having possession of, access to, control over, or being entrusted with, any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data—

(A) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with intent to injure the United States or with intent to secure an advantage to any foreign nation, upon conviction thereof, shall be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than twenty years, or both;

(B) communicates, transmits, or discloses the same to any individual or person, or attempts or conspires to do any of the foregoing, with reason to believe such data will be utilized to injure the United States or to secure an advantage to any foreign nation, shall, upon conviction, be punished by a fine of not more than \$10,000 or imprisonment for not more than ten years, or both.

(3) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, acquires or attempts or conspires to acquire any document, writing, sketch, photograph, plan, model, instrument, appliance, note or information involving or incorporating restricted data shall, upon conviction thereof, be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than twenty years, or both.

(4) Whoever, with intent to injure the United States or with intent to secure an advantage to any foreign nation, removes, conceals, tampers with, alters, mutilates, or destroys any document, writing, sketch, photograph, plan, model, instrument, appliance, or note involving or incorporating restricted data and used by any individual or person in connection with the production of fissionable material, or

research or development relating to atomic energy, conducted by the United States, or financed in whole or in part by Federal funds, or conducted with the aid of fissionable material, shall be punished by death or imprisonment for life (but the penalty of death or imprisonment for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or imprisonment for not more than twenty years or both.

(5) (A) No person shall be prosecuted for any violation under this section unless and until the Attorney General of the United States has advised the Commission with respect to such prosecution and no such prosecution shall be commenced except upon the express direction of the Attorney General of the United States.

(B) (i) No arrangement shall be made under section 3, no contract shall be made or continued in effect under section 4, and no license shall be issued under section 4 (e) or 7, unless the person with whom such arrangement is made, the contractor or prospective contractor, or the prospective licensee agrees in writing not to permit any individual to have access to restricted data until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual and the Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense or security.

(ii) Except as authorized by the Commission in case of emergency, no individual shall be employed by the Commission until the Federal Bureau of Investigation shall have made an investigation and report to the Commission on the character, associations, and loyalty of such individual.

(iii) Notwithstanding the provisions of subparagraphs (i) and (ii), during such period of time after the enactment of this Act as may be necessary to make the investigation, report, and determination required by such paragraphs, (a) any individual who was permitted access to restricted data by the Manhattan Engineer District may be permitted access to restricted data and (b) the Commission may employ any individual who was employed by the Manhattan Engineer District.

(iv) To protect against the unlawful dissemination of restricted data and to safeguard facilities, equipment, materials, and other property of the Commission, the President shall have authority to utilize the services of any Government agency to the extent he may deem necessary or desirable.

(C) All violations of this Act shall be investigated by the Federal Bureau of Investigation of the Department of Justice.

(6) This section shall not exclude the applicable provisions of any other laws, except that no Government agency shall take any action under such other laws inconsistent with the provisions of this section.

(c) **INSPECTIONS, RECORDS, AND REPORTS.**—The Commission is—

(1) authorized by regulation or order to require such reports and the keeping of such records with respect to, and to provide for such inspections of, activities and studies of types specified in section 3 and of activities under licenses issued pursuant to

section 7 as may be necessary to effectuate the purposes of this Act;

(2) authorized and directed by regulation or order to require regular reports and records with respect to, and to provide for frequent inspections of, the production of fissionable material in the conduct of research and development activities.

PATENTS AND INVENTIONS

SEC. 11. (a) PRODUCTION AND MILITARY UTILIZATION.

(1) No patent shall hereafter be granted for any invention or discovery which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any patent granted for any such invention or discovery is hereby revoked, and just compensation shall be made therefor.

(2) No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(3) Any person who has made or hereafter makes any invention or discovery useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon shall file with the Commission a report containing a complete description thereof, unless such invention or discovery is described in an application for a patent filed in the Patent Office by such person within the time required for the filing of such report. The report covering any such invention or discovery shall be filed on or before whichever of the following is the latest: (A) The sixtieth day after the date of enactment of this Act; (B) the sixtieth day after the completion of such invention or discovery; or (C) the sixtieth day after such person first discovers or first has reason to believe that such invention or discovery is useful in such production or utilization.

(b) USE OF INVENTIONS FOR RESEARCH.—No patent hereafter granted shall confer any rights with respect to any invention or discovery to the extent that such invention or discovery is used in the conduct of research or development activities in the fields specified in section 3. Any rights conferred by any patent heretofore granted for any invention or discovery are hereby revoked to the extent that such invention or discovery is so used, and just compensation shall be made therefor.

(c) NONMILITARY UTILIZATION.—

(1) It shall be the duty of the Commission to declare any patent to be affected with the public interest if (A) the invention or discovery covered by the patent utilizes or is essential in the utilization of fissionable material or atomic energy; and (B) the licensing of such invention or discovery under this subsection is necessary to effectuate the policies and purposes of this Act.

(2) Whenever any patent has been declared, pursuant to paragraph (1), to be affected with the public interest—

(A) The Commission is hereby licensed to use the invention or discovery covered by such patent in performing any of its powers under this Act; and

(B) Any person to whom a license has been issued under section 7 is hereby licensed to use the invention or discovery covered by such patent to the extent such invention or discovery is used by him in carrying on the activities authorized by his license under section 7.

The owner of the patent shall be entitled to a reasonable royalty fee for any use of an invention or discovery licensed by this subsection. Such royalty fee may be agreed upon by such owner and the licensee, or in the absence of such agreement shall be determined by the Commission.

(3) No court shall have jurisdiction or power to stay, restrain, or otherwise enjoin the use of any invention or discovery by a licensee, to the extent that such use is licensed by paragraph (2) above, on the ground of infringement of any patent. If in any action for infringement against such licensee the court shall determine that the defendant is exercising such license, the measure of damages shall be the royalty fee determined pursuant to this section, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court. If no royalty fee has been determined, the court shall stay the proceeding until the royalty fee is determined pursuant to this section. If any such licensee shall fail to pay such royalty fee, the patentee may bring an action in any court of competent jurisdiction for such royalty fee, together with such costs, interest, and reasonable attorney's fees as may be fixed by the court.

(d) ACQUISITION OF PATENTS.—The Commission is authorized to purchase, or to take, requisition, or condemn, and make just compensation for, (1) any invention or discovery which is useful in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon, or which utilizes or is essential in the utilization of fissionable material or atomic energy, or (2) any patent or patent application covering any such invention or discovery. The Commissioner of Patents shall notify the Commission of all applications for patents heretofore or hereafter filed which in his opinion disclose such inventions or discoveries and shall provide the Commission access to all such applications.

(e) COMPENSATION AWARDS, AND ROYALTIES.—

(1) PATENT COMPENSATION BOARD.—The Commission shall designate a Patent Compensation Board, consisting of two or more employees of the Commission, to consider applications under this subsection.

(2) ELIGIBILITY.—

(A) Any owner of a patent licensed under subsection (c) (2) or any licensee thereunder may make application to the Commission for the determination of a reasonable royalty fee in accordance with such procedures as it by regulation may establish.

(B) Any person seeking to obtain the just compensation provided in subsections (a), (b), or (d) shall make application therefor to the Commission in accordance with such procedures as it may by regulation establish.

(C) Any person making any invention or discovery useful in the production of fissionable material or in the utilization of

fissionable material or atomic energy for a military weapon who is not entitled to compensation therefor under subsection (a) and who has complied with subsection (a) (3) above may make application to the Commission for, and the Commission may grant, an award.

(D) Any person making application under this subsection shall have the right to be represented by counsel.

(3) STANDARDS.—

(A) In determining such reasonable royalty fee, the Commission shall take into consideration any defense, general or special, that might be pleaded by a defendant in an action for infringement, the extent to which, if any, such patent was developed through federally financed research, the degree of utility, novelty, and importance of the invention or discovery, and may consider the cost to the owner of the patent of developing such invention or discovery or acquiring such patent.

(B) In determining what constitutes just compensation under subsection (a), (b), or (d) above, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery, and may determine that such compensation be paid in periodic payments or in a lump sum.

(C) In determining the amount of any award under paragraph (2) (C) of this subsection, the Commission shall take into account the considerations set forth in paragraph (A) above, and the actual use of such invention or discovery. Awards so made may be paid by the Commission in periodic payments or in a lump sum.

(4) JUDICIAL REVIEW.—Any person aggrieved by any determination of the Commission of an award or of a reasonable royalty fee may obtain a review of such determination in the Court of Appeals for the District of Columbia by filing in such court, within thirty days after notice of such determination, a written petition praying that such determination be set aside. A copy of such petition shall be forthwith served upon the Commission and thereupon the Commission shall file with the court a certified transcript of the entire record in the proceeding, including the findings and conclusions upon which the determination was based. Upon the filing of such transcript the court shall have exclusive jurisdiction upon the record certified to it to affirm the determination in its entirety or set it aside and remand it to the Commission for further proceedings. The findings of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. The court's judgment shall be final, subject, however, to review by the Supreme Court of the United States upon writ of certiorari on petition therefor under section 240 of the Judicial Code (U. S. C., title 28, sec. 347), by the Commission or any party to the court proceeding.

GENERAL AUTHORITY

SEC. 12. (a) In the performance of its functions the Commission is authorized to—

(1) establish advisory boards to advise with and make recommendations to the Commission on legislation, policies, administration, research, and other matters;

(2) establish by regulation or order such standards and instructions to govern the possession and use of fissionable and byproduct materials as the Commission may deem necessary or desirable to protect health or to minimize danger from explosions and other hazards to life or property;

(3) make such studies and investigations, obtain such information, and hold such hearings as the Commission may deem necessary or proper to assist it in exercising any authority provided in this Act, or in the administration or enforcement of this Act, or any regulations or orders issued thereunder. For such purposes the Commission is authorized to administer oaths and affirmations, and by subpoena to require any person to appear and testify, or to appear and produce documents, or both, at any designated place. No person shall be excused from complying with any requirements under this paragraph because of his privilege against self-incrimination, but the immunity provisions of the Compulsory Testimony Act of February 11, 1893 (U. S. C., title 49, sec. 46), shall apply with respect to any individual who specifically claims such privilege. Witnesses subpoenaed under this subsection shall be paid the same fees and mileage as are paid witnesses in the district courts of the United States;

(4) appoint and fix the compensation of such officers and employees as may be necessary to carry out the functions of the Commission. Such officers and employees shall be appointed in accordance with the civil-service laws and their compensation fixed in accordance with the Classification Act of 1923, as amended, except that to the extent the Commission deems such action necessary to the discharge of its responsibilities, personnel may be employed and their compensation fixed without regard to such laws. The Commission shall make adequate provision for administrative review of any determination to dismiss any employee;

(5) acquire such materials, property, equipment, and facilities, establish or construct such buildings and facilities, and modify such buildings and facilities from time to time as it may deem necessary, and construct, acquire, provide, or arrange for such facilities and services (at project sites where such facilities and services are not available) for the housing, health, safety, welfare, and recreation of personnel employed by the Commission as it may deem necessary;

(6) with the consent of the agency concerned, utilize or employ the services or personnel of any Government agency or any State or local government, or voluntary or uncompensated personnel, to perform such functions on its behalf as may appear desirable;

(7) acquire, purchase, lease, and hold real and personal property as agent of and on behalf of the United States and to sell, lease, grant, and dispose of such real and personal property as provided in this Act; and

(8) without regard to the provisions of the Surplus Property Act of 1944 or any other law, make such disposition as it may deem desirable of (A) radioactive materials, and (B) any other property the special disposition of which is, in the opinion of the Commission, in the interest of the national security.

(b) **SECURITY.**—The President may, in advance, exempt any specific action of the Commission in a particular matter from the provisions of law relating to contracts whenever he determines that such action is essential in the interest of the common defense and security.

(c) **ADVISORY COMMITTEES.**—The members of the General Advisory Committee established pursuant to section 2 (b) and the members of advisory boards established pursuant to subsection (a) (1) of this section may serve as such without regard to the provisions of sections 109 and 113 of the Criminal Code (18 U. S. C., secs. 198 and 203) or section 19 (e) of the Contract Settlement Act of 1944, except insofar as such sections may prohibit any such member from receiving compensation in respect of any particular matter which directly involves the Commission or in which the Commission is directly interested.

COMPENSATION FOR PRIVATE PROPERTY ACQUIRED

SEC. 13. (a). The United States shall make just compensation for any property or interests therein taken or requisitioned pursuant to sections 5 and 11. The Commission shall determine such compensation. If the compensation so determined is unsatisfactory to the person entitled thereto, such person shall be paid 50 per centum of the amount so determined, and shall be entitled to sue the United States in the Court of Claims or in any district court of the United States in the manner provided by sections 24 (20) and 145 of the Judicial Code to recover such further sum as added to said 50 per centum will make up such amount as will be just compensation.

(b) In the exercise of the rights of eminent domain and condemnation, proceedings may be instituted under the Act of August 1, 1888 (U. S. C., title 40, sec. 257), or any other applicable Federal statute. Upon or after the filing of the condemnation petition, immediate possession may be taken and the property may be occupied, used, and improved for the purposes of this Act, notwithstanding any other law. Real property acquired by purchase, donation, or other means of transfer may also be occupied, used, and improved for the purposes of this Act, prior to approval of title by the Attorney General.

JUDICIAL REVIEW AND ADMINISTRATIVE PROCEDURE

SEC. 14. (a) Notwithstanding the provisions of section 12 of the Administrative Procedure Act (Public Law 404, Seventy-ninth Congress, approved June 11, 1946) which provide when such Act shall take effect, section 10 of such Act (relating to judicial review) shall be applicable, upon the enactment of this Act, to any agency action under the authority of this Act or by any agency created by or under the provisions of this Act.

(b) Except as provided in subsection (a), no provision of this Act shall be held to supersede or modify the provisions of the Administrative Procedure Act.

(c) As used in this section the terms "agency action" and "agency" shall have the same meaning as is assigned to such terms in the Administrative Procedure Act.

JOINT COMMITTEE ON ATOMIC ENERGY

SEC. 15. (a) There is hereby established a Joint Committee on Atomic Energy to be composed of nine Members of the Senate to be

appointed by the President of the Senate, and nine Members of the House of Representatives to be appointed by the Speaker of the House of Representatives. In each instance not more than five members shall be members of the same political party.

(b) The joint committee shall make continuing studies of the activities of the Atomic Energy Commission and of problems relating to the development, use, and control of atomic energy. The Commission shall keep the joint committee fully and currently informed with respect to the Commission's activities. All bills, resolutions, and other matters in the Senate or the House of Representatives relating primarily to the Commission or to the development, use, or control of atomic energy shall be referred to the joint committee. The members of the joint committee who are Members of the Senate shall from time to time report to the Senate, and the members of the joint committee who are Members of the House of Representatives shall from time to time report to the House, by bill or otherwise, their recommendations with respect to matters within the jurisdiction of their respective Houses which are (1) referred to the joint committee or (2) otherwise within the jurisdiction of the joint committee.

(c) Vacancies in the membership of the joint committee shall not affect the power of the remaining members to execute the functions of the joint committee, and shall be filled in the same manner as in the case of the original selection. The joint committee shall select a chairman and a vice chairman from among its members.

(d) The joint committee, or any duly authorized subcommittee thereof, is authorized to hold such hearings, to sit and act at such places and times, to require, by subpoena or otherwise, the attendance of such witnesses and the production of such books, papers, and documents, to administer such oaths, to take such testimony, to procure such printing and binding, and to make such expenditures as it deems advisable. The cost of stenographic services to report such hearings shall not be in excess of 25 cents per hundred words. The provisions of sections 102 to 104, inclusive, of the Revised Statutes shall apply in case of any failure of any witness to comply with a subpoena or to testify when summoned under authority of this section.

(e) The joint committee is empowered to appoint and fix the compensation of such experts, consultants, technicians, and clerical and stenographic assistants as it deems necessary and advisable, but the compensation so fixed shall not exceed the compensation prescribed under the Classification Act of 1923, as amended, for comparable duties. The committee is authorized to utilize the services, information, facilities, and personnel of the departments and establishments of the Government.

ENFORCEMENT

SEC. 16. (a) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of sections 4 (b), 4 (e), 5 (a) (3), or 6 (b) shall, upon conviction thereof, be punished by a fine of not more than \$10,000 or by imprisonment for not more than five years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by death or imprisonment for life (but the penalty of death or imprisonment

for life may be imposed only upon recommendation of the jury and only in cases where the offense was committed with intent to injure the United States); or by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(b) Whoever willfully violates, attempts to violate, or conspires to violate, any provision of this Act other than those specified in subsection (a) and other than section 10 (b), or of any regulation or order prescribed or issued under sections 5 (b) (4), 10 (c), or 12 (a) (2), shall, upon conviction thereof, be punished by a fine of not more than \$5,000 or by imprisonment for not more than two years, or both, except that whoever commits such an offense with intent to injure the United States or with intent to secure an advantage to any foreign nation shall, upon conviction thereof, be punished by a fine of not more than \$20,000 or by imprisonment for not more than twenty years, or both.

(c) Whenever in the judgment of the Commission any person has engaged or is about to engage in any acts or practices which constitute or will constitute a violation of any provision of this Act, or any regulation or order issued thereunder, it may make application to the appropriate court for an order enjoining such acts or practices, or for an order enforcing compliance with such provision, and upon a showing by the Commission that such person has engaged or is about to engage in any such acts or practices a permanent or temporary injunction, restraining order, or other order may be granted.

(d) In case of failure of refusal to obey a subpoena served upon any person pursuant to section 12 (a) (3), the district court for any district in which such person is found or resides or transacts business, upon application by the Commission, shall have jurisdiction to issue an order requiring such person to appear and give testimony or to appear and produce documents, or both, in accordance with the subpoena; and any failure to obey such order of the court may be punished by such court as a contempt thereof.

REPORTS

SEC. 17. The Commission shall submit to the Congress, in January and July of each year, a report concerning the activities of the Commission. The Commission shall include in such report, and shall at such other times as it deems desirable submit to the Congress, such recommendations for additional legislation as the Commission deems necessary or desirable.

DEFINITIONS

SEC. 18. As used in this Act—

(a) The term "atomic energy" shall be construed to mean all forms of energy released in the course of or as a result of nuclear fission or nuclear transformation.

(b) The term "Government agency" means any executive department, commission, independent establishment, corporation wholly or partly owned by the United States which is an instrumentality of the United States, board, bureau, division, service, office, officer, authority, administration, or other establishment, in the executive branch of the Government.

(c) The term "person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, the United States or any agency thereof, any government other than the United States, any political subdivision of any such government, and any legal successor, representative, agent, or agency of the foregoing, or other entity, but shall not include the Commission or officers or employees of the Commission in the exercise of duly authorized functions.

(d) The term "United States", when used in a geographical sense, includes all Territories and possessions of the United States and the Canal Zone.

(e) The term "research and development" means theoretical analysis, exploration, and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes.

(f) The term "equipment or device utilizing fissionable material or atomic energy" shall be construed to mean any equipment or device capable of making use of fissionable material or peculiarly adapted for making use of atomic energy and any important component part especially designed for such equipment or devices, as determined by the Commission.

(g) The term "facilities for the production of fissionable material" shall be construed to mean any equipment or device capable of such production and any important component part especially designed for such equipment or devices, as determined by the Commission.

APPROPRIATIONS

SEC. 19. There are hereby authorized to be appropriated such sums as may be necessary and appropriate to carry out the provisions and purposes of this Act. The Acts appropriating such sums may appropriate specified portions thereof to be accounted for upon the certification of the Commission only. Funds appropriated to the Commission shall, if obligated by contract during the fiscal year for which appropriated, remain available for expenditure for four years following the expiration of the fiscal year for which appropriated. After such four-year period, the unexpended balances of appropriations shall be carried to the surplus fund and covered into the Treasury.

SEPARABILITY OF PROVISIONS

SEC. 20. If any provision of this Act, or the application of such provision to any person or circumstances, is held invalid, the remainder of this Act or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SHORT TITLE

SEC. 21. This Act may be cited as the "Atomic Energy Act of 1946".
Approved August 1, 1946.

